



Figure 10. Small Retail Prototype Building Rendering

The energy performance of the prototypical building was simulated using long term average weather data for Covington, Kentucky. Savings were estimated for a representative high efficiency option corresponding to a set of HVAC system type and size combinations. The energy and demand savings were normalized per ton of cooling capacity. The results of the simulation runs are shown in Table 24.

Table 24. Small Retail Demand and Energy Savings

| HVAC System Type and Size | Base Efficiency | Measure Efficiency | Demand savings (kW/ton) | Energy savings (kWh/ton) |
|---------------------------|-----------------|--------------------|-------------------------|--------------------------|
| AC <65,000 1 Ph | 13 | 14 | 0.078 | 73.9 |
| AC <65,000 3 Ph | 12 | 13 | 0.058 | 55.4 |
| AC 65,000 - 135,000 | 10.1 | 11 | 0.081 | 76.1 |
| AC 135,000 - 240,000 | 9.5 | 11 | 0.142 | 134.9 |
| AC 240,000 - 760,000 | 9.3 | 10 | 0.074 | 70.7 |
| AC >760,000 | 9 | 10 | 0.110 | 104.4 |
| HP <65,000 1 Ph | 13 | 14 | 0.078 | 113.1 |
| HP <65,000 3 Ph | 12 | 13 | 0.058 | 67.8 |
| HP 65,000 - 135,000 | 9.9 | 11 | 0.081 | 126.2 |
| HP 135,000 - 240,000 | 9.1 | 10 | 0.142 | 141.0 |
| HP >240,000 | 8.8 | 10 | 0.074 | 176.4 |

Full-service Restaurant Prototype

A prototypical building energy simulation model for a full-service restaurant was developed using the DOE-2.2 building energy simulation program. The characteristics of the full service restaurant prototype are summarized in Table 25.

Table 25. Full Service Restaurant Prototype Description

| Characteristic | Value |
|-------------------------------|---|
| Vintage | Existing (1970s) vintage |
| Size | 2000 square foot dining area 600 square foot entry/reception area 1200 square foot kitchen 200 square foot restrooms |
| Number of floors | 1 |
| Wall construction and R-value | Concrete block with brick veneer, R-11 |
| Roof construction and R-value | Wood frame with built-up roof, R-19 |
| Glazing type | Single pane clear |
| Lighting power density | Dining area: 1.7 W/SF Entry area: 2.5 W/SF Kitchen: 4.3 W/SF Restrooms: 1.0 W/SF |
| Plug load density | Dining area: 0.6 W/SF Entry area: 0.6 W/SF Kitchen: 3.1 W/SF Restrooms: 0.2 W/SF |
| Operating hours | 9am – 12am |
| HVAC system type | Packaged single zone, no economizer |
| HVAC system size | Dining area: 150 SF/ton Entry area: 90 SF/ton Kitchen: 220 SF/ton Restrooms: 190 SF/ton |
| Thermostat setpoints | Occupied hours: 77 cooling, 72 heating Unoccupied hours: 82 cooling, 67 heating |

A computer-generated sketch of the full-service restaurant prototype is shown in Figure 11.

Small Office Prototype

A prototypical building energy simulation model for a small was developed using the DOE-2.2 building energy simulation program. The characteristics of the small office prototype are summarized in Table 27.

Table 27. Small Office Prototype Building Description

| Characteristic | Value |
|-------------------------------|--|
| Vintage | Existing (1970s) vintage |
| Size | 10,000 square feet |
| Number of floors | 2 |
| Wall construction and R-value | Wood frame with brick veneer, R-11 |
| Roof construction and R-value | Wood frame with built-up roof, R-19 |
| Glazing type | Single pane clear |
| Lighting power density | Perimeter offices: 2.2 W/SF Core offices: 1.5 W/SF |
| Plug load density | Perimeter offices: 1.6 W/SF Core offices: 0.7 W/SF |
| Operating hours | Mon-Sat: 9am – 6pm Sun: Unoccupied |
| HVAC system type | Packaged single zone, no economizer |
| HVAC system size | 180 SF/ton |
| Thermostat setpoints | Occupied hours: 76 cooling, 72 heating Unoccupied hours: 81 cooling, 67 heating |

A computer-generated sketch of the small office prototype is shown in Figure 12.

Energy and demand savings estimates were developed for each measure in the database using the following engineering equations:

$$kW_{savings} = \sum_i^{buildings} \sum_j^{measures} units_{i,j} \times ton \times kW_{saved/ton_j} \times F_{adj} \times CDF_i$$

$$kWh_{savings} = \sum_i^{buildings} \sum_j^{measures} units_{i,j} \times ton \times kWh_{saved/ton_j} \times F_{adj}$$

$$F_{adj} = \frac{1 - \frac{EER_{base}}{EER_{installed}}}{1 - \frac{EER_{base}}{EER_{measure}}}$$

where:

- Units = quantity of each type of HVAC measure installed
- Ton = cooling capacity of HVAC unit
- kW/ton = demand savings per ton from prototype model runs by building and measure type
- kWh/ton = energy savings per ton prototype model runs by building and measure type
- Fadj = efficiency adjustment factor
- CDF = coincident diversity factor by building type

An efficiency adjustment factor was used to account for differences in the installed equipment SEER or EER verses the SEER or EER assumptions used for high efficiency equipment in the simulations. Since HVAC energy consumption is an inverse relationship with SEER and EER, a simple scaling of the EER or SEER differences is not appropriate. This adjustment accurately reflects the influence of efficiency differences on energy and demand savings. The coincident diversity factors from the PG&E and SCE programs as shown in the secondary research section of this report were applied.

The HVAC program gross energy and demand savings were summed across all entries in the database, and normalized on a per-measure and per-program-participant basis. The estimates embedding in the program tracking system, the savings estimated by this evaluation, and the estimates used by Duke Energy for program planning purposes are compared in Table 29.

Table 29. HVAC Program Gross Demand and Energy Savings

| Savings Basis | Source | kW | kWh |
|---------------------|---------------------|------|-------|
| Savings/measure | Planning Estimate | | 130 |
| | Tracking System | 0.16 | 443 |
| | Evaluation Estimate | 0.69 | 763 |
| Savings/participant | Tracking System | 1.3 | 3,673 |
| | Evaluation Estimate | 5.7 | 6,336 |

Appendix A: Process Evaluation: Program Manager Interview Protocol

Name: _____

Title: _____

Position description and general responsibilities:

We are conducting this interview to obtain your opinions about and experiences with the Small Commercial and Industrial Program. We'll talk about the Program and its objectives, your thoughts on improving the program and its participation rates, and the technologies the program covers. The interview will take about an hour to complete. May we begin?

Program Objectives

1. In your own words, please describe the Small Commercial and Industrial Incentive Program's objectives.
2. In your opinion, which objectives do you think are being met or will be met? How do you think the program's objectives have changed over time?
3. Are there any program objectives that are not being addressed or that you think should have more attention focused on them? If yes, which ones? How should these objectives be addressed? What should be changed? Do you think these changes will increase program participation?
4. Should the program objectives be changed in any way because of market conditions, other external or internal program influences, or any other conditions that have developed since the program objectives were devised? What changes would you put into place, and how would it affect the objectives?
5. Do you think the incentives application process offered through the small C&I program is easy to understand and complete?

6. Do you think the incentives offered through the program are large enough to entice the C&I community to purchase the high efficiency items? Why or why not?
7. Do you think the incentives cover the right equipment? Do you think there is equipment that is currently incentivized that should not be, or equipment that is not covered that should be?
8. Which measures have been most used? Why, and why have other measures not been adopted? Why is there a difference between states? (Note in KY the program got off to a fast start and we had to throttle it back, now IN is begging to pick up. Why are these difference there?)
9. What kinds of marketing, outreach and customer contact approaches do you use to make your customers aware of the program and its options? Are there any changes to the program marketing that you think would increase participation?
10. How do you inform trade allies and contractors about the program? How effective has this been in getting participation from the contractors?
11. Are there any changes to the incentives or marketing that could possibly increase participation in the program?
12. The program has experienced a drop in participation over the last year or so and then recently picked up in Indiana, why do you think this has occurred? What can be done to boost participation overall?
13. Thinking about how your program enrolls participants, what do you think your level of freeridership is for this program? (*That is, what percent of the equipment rebated through the program would have been purchased and installed without the program's incentive?*)
14. What do you think the level of spillover is for this program? (*That is, what percent of the participants take similar actions in their business that are not rebated through the program?*)

Overall Small C&I Incentives Management

15. Describe the use of any advisors, technical groups or organizations that have in the past or are currently helping you think through the program's approach or methods. How often do you use these resources? What do you use them for?
16. Overall, what about the Small Commercial and Industrial Incentive Program works well and why?
17. What doesn't work well and why? Do you think this discourages participation?

- 18. Can you identify any market or operational barriers that impede a more efficient program operation?
- 19. If you had a magic wand and could change any part of the program what would you change and why?

Program Design & Implementation

- 20. What market information, research or market assessments are you using to determine the best target markets or market segments to focus on?
- 21. What market information, research or market assessments are you using to identify market barriers, and develop more effective delivery mechanisms?
- 22. How do you manage and monitor or evaluate contractor involvement or performance? What is the quality control and tracking process? What do you do if contractor performance is exemplary or below expectations?
- 23. In your opinion, did the incentives cover enough different kinds of energy efficient products?

1. Yes 2. No 99. DK/NS

If no, 22b. What other products or equipment should be included?

- 24. In what ways can the Small Commercial and Industrial Incentive Program's operations be improved?
- 25. Do you have any suggestions for how program participation can be increased?

Appendix B: Participant Survey Instrument

Name: _____

Title: _____

Hello, my name is _____. I am calling on behalf of Duke Energy to conduct a customer survey about the Commercial and Industrial Program. May I speak with _____ please?

If person talking, proceed. If person is called to the phone reintroduce.

If not home, ask when would be a good time to call and schedule the call-back:

- Call back 1: Date: _____, Time: _____ AM or PM
 - Call back 2: Date: _____, Time: _____ AM or PM
 - Call back 3: Date: _____, Time: _____ AM or PM
 - Call back 4: Date: _____, Time: _____ AM or PM
 - Call back 5: Date: _____, Time: _____ AM or PM
 - Call back 6: Date: _____, Time: _____ AM or PM
 - Call back 7: Date: _____, Time: _____ AM or PM
- Contact dropped after seventh attempt.

We are conducting this survey to obtain your opinions about the Commercial and Industrial Efficiency Program. We are not selling anything. The survey will take about 10-15 minutes and your answers will be confidential, and will help us to make improvements to the program to better serve others. May we begin the survey?

1. Our records indicate that you participated in the Commercial and Industrial Incentive Program in <date> and that you installed <technology> through the program and received an incentive for your purchase. Do you recall participating in this program?

- 1. Yes, begin
- 2. No,
- 99. DK/NS

Skip to Q2.

↓

1a. This program was provided through Duke Energy. In this program, you purchased an energy efficient lighting, HVAC, motor, or pump. In exchange for purchasing the energy efficient option, Duke Energy provided your company with an incentive.

Do you remember participating in this program?

1. Yes, begin → Go to Q2.
2. No, ↓
99. DK/NS ↓

If No or DK/NS terminate interview and go to next participant.

2. How did you become aware of the C&I Incentive Program?

- a. Duke Energy sent me a brochure
- b. Duke Energy called and talked to me about it
- c. Duke energy website.
- d. A contractor I was working with told me about the program
- e. An equipment supplier
- f. I saw an ad in _____
- g. Other _____
- h. DK/NS

3. When you first heard about the program and considered taking advantage of the incentive, did you do any additional investigation to confirm the program's offering, or was the information you had adequate to make a participation decision?

- a. The information was adequate
- b. Didn't need to confirm/Nothing
- c. Went to the web site
- d. Called or emailed Duke Energy
- e. Called or emailed a contractor
- f. Called or emailed a salesperson
- g. Other: _____
- h. DK/NS

If c, d, e, f, g: 4. How well did this work for you, were you able to acquire a more complete understanding of the program? Note: many may have only heard about this through their contractors and thus had minimal involvement, so this question may only apply to a few of them.

1. Yes 2. No 99. DK/NS

5. Did you have additional questions that were not answered? Were their questions that you were unable to answer or information that you were unable to obtain?

1. Yes 2. No 99. DK/NS

5a. What were they?

6. Who filled out the program incentive forms for your company?

- a. I did
- b. Someone from my company did
- c. The contractor
- d. The salesperson
- e. Someone from Duke Energy

7. Who submitted the forms to Duke/Cinergy?

- a. I did
- b. Someone from my company did
- c. The contractor
- d. The salesperson
- e. Someone from Duke Energy

8. If they filled it out. Was the incentive form easy to understand?

1. Yes 2. No 99. DK/NS

If not, 8b. Do you remember what it was that was not clear or which part of it was difficult?

9. Did you have any problems receiving the incentives?

1. Yes 2. No 99. DK/NS

If yes, 9b. Please explain the problem and how it was resolved. Was it resolved to your satisfaction?

10. Did you originally plan on purchasing the exact same efficiency level in the equipment you purchased before you knew that there was an incentive offered by Duke Energy?

1. Yes 2. No 99. DK/NS

11. In your decision process, did you search for or consider other, less energy efficient equipment that might have cost less?

1. Yes 2. No 99. DK/NS

12. What was the primary reason that you decided to purchase or upgrade your equipment?

1. Remodeling
 2. Equipment failure
 3. Contractor recommendation
 4. Energy Savings
 5. Got a good deal
 6. It was an old system
 7. Combination of above: *list:*
-

13. I would like to ask how important the program incentive was in your decision to buy the more energy efficient model. Would you say the incentive was... (read and check the best response).

- a. # The primary reason why you purchased the high efficacy model,
- b. #An important reason, along with other reasons,
- c. #One of the reasons, but it was not the most important,
- d. #One of the reasons, but it was a minor or unimportant reason, or
- e. #It was not a reason at all,
- f. #DK/NS.

14. If the incentives were not available from the program, would you have delayed your purchase, or would you have made the purchased at the exact same time?

- a. # The purchase would have been delayed – How long do you think you might have waited to make the purchase? _____
- b. # The purchase would have been made at the same time
- c. #DK/NS

15. Were there other reasons in addition to the incentive that you went with the high efficiency <technology> instead of something less expensive to purchase?

16. When firms have experience with energy efficiency programs or products they sometimes make similar decisions to continue the energy savings in other parts of their business. Have you taken any other energy efficiency actions that may have been, in some way, influenced by your experiences with the Duke program?

1. Yes 2. No 99. DK/NS

- a. *If yes, What have you done?*
- b. *If yes, How much money do you think you have saved as a result?*

17. One of the objectives that the program would like to see over the next year is increased participation of businesses like yours. Can you think of things that the program can do to help increase participation or help increase interest from people like yourself?

- a. #Increase general advertising
- b. #Increase advertising in trade media
- c. #Present the program in trade or associated meetings
- d. #Offer larger incentives
- e. #Offer incentives on other items/include other items
- f. #Have program staff call small C&I customers
- g. #Make the process more streamlined for customers
- h. #Make the process more streamlined for contractors
- i. #Other: _____

18. During your participation process, did you need to contact Cinergy/Duke to obtain information about the program?

1. Yes 2. No 99. DK/NS

If yes, 18b. Were your questions or needs effectively handled by the Cinergy/Duke?

- 1. Yes
- 2. No
- 99. DK/NS

18c. How might this be improved?

19. Overall, what about the C&I Incentive Program works well and why?

20. What doesn't work well and why?

We would like to ask you a few questions about your satisfaction with the program. For these questions we would like you to rate your satisfaction using a 1 to 10 scale where a 1 means that you are very dissatisfied with the program and a 10 means that you are very satisfied.

21. How would you rate your satisfaction with.

a. The incentive levels provided by the program

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

b. The ease of filling out the participation and incentive forms

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

c. The time it took for you to receive your incentive

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

d. The number and kind of technologies covered in the program

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

e. The information you were provided explaining the program,

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

For each item above that received a score of 8 or less ask:
21a. What could have been done to make this better?

For item a: the incentive levels provided by the program

For item b: the ease of filling out the participation and incentive forms

For item c: the time it took for your to receive your incentive

For item d: the number and kind of technologies covered in the program

For item e: the information you were provided explaining the program

22. Considering all aspects of the program, how would you rate your overall satisfaction with the Program?

1 2 3 4 5 6 7 8 9 10

If score is 8 or less ask: What could have been done to make your experience better, or have we already covered it?

APPENDIX J

**PowerShare Impact Analysis
in Kentucky**

Final Report

**Prepared for
Duke Energy**

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October 15, 2007

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Kentucky 2007 PowerShare Impact Analysis

This analysis presents the results of the load analysis of the PowerShare program for customers within Duke Energy Kentucky. This analysis relies upon a statistical analysis of actual customer whole premise hourly electricity consumption during the summer of 2007, which includes two PowerShare events on August 8th and 9th.

For this analysis, since hourly data is available before, during, and after the event, the statistical analysis includes all data throughout the summer period. This is contrasted with the Pro Forma analysis, which only includes pre-event data. In addition, this analysis is focused on expected impacts at system level at expected peak temperature (93.5°) rather than for customer payments. Thus, the reported impacts are developed as a function of temperature rather than as a function of time as was done in the Pro Forma analysis. Therefore, the results of this analysis are not directly comparable to the results of the Pro Forma results. Table 1 presents the results of this analysis.

Table 1: KY PowerShare Results

| Savings | |
|---|-----------------------------|
| Program Effect (looking only at Savings with t-value >1.5) | |
| Call Participants | 11.7 kWh/Degree Fahrenheit |
| Quote Participants | 0.54 kWh/Degree Fahrenheit |
| Total | 12.23 kWh/Degree Fahrenheit |
| Total Program Effect (looking only at Savings with t-value >1.5) at 93.5° | 1,144 kWh per hour |

Because the PowerShare participant population consists of a diverse range of facilities, it was determined that pooling customers into a single statistical model was inappropriate. Therefore, a statistical equation was estimated for each participant in the PowerShare program. This model had the hourly electricity consumption as the dependent variable, and included weather terms, time of day, and the event term as independent variables.

Algebraically, the model is described as follows:

$$y_t = \alpha + \beta x_t + \varepsilon_t,$$

where:

- y_t = electricity consumption for the facility during hour t
- α = constant term for the facility
- β = vector of coefficients
- x_t = vector of variables that represent factors causing changes in energy consumption for facility during hour t (i.e., weather, time of day, and participation)
- ε_t = error term for during hour t .

The independent variables that were used in the model include:

- The current temperature as well as the temperature for the previous three hours
- The current humidity as well as the humidity for the previous three hours
- A variable incorporating the interaction between temperature and humidity
- An indicator variable for weekend days
- Indicator variables for all 24 hours of the day
- Indicator variables for the month
- An indicator variable for the PowerShare event interacted with the temperature for that hour.

Since this is a pure time-series model, it is critical to account for the potential for autocorrelation, where the error term in one hour is correlated with the error term in the preceding hour(s).¹ In order to account for this potential, the models were estimated using an AR(1) specification:

$$\varepsilon_t = \rho\varepsilon_{t-1} + \mu_t$$

Where:

- ρ = is an estimated parameter (Phi)
- μ_t = is white noise (i.e., zero mean with no autocorrelation).

The parameters ρ and β in the above equations are estimated for each participant via maximum likelihood techniques. The summary of the estimated electric models are presented in Table 2.²

¹ The intuition is that the factors that cannot be “explained” in one hour cannot be explained in other hours. In theory, autocorrelation does not result in bias results, but it does affect the standard error of the estimates, which may lead to erroneous conclusions.

² The models include a large number of other independent variables discussed above. These terms were not included in order make interpretation clearer. Each estimated model for each customer containing the complete set of independent variables are included in the appendix.

Table 2: Summary of the Estimated PowerShare Models

| Customer | Phi (AR term) (t-value) | PowerShare Savings (kWh) per degree (t-value) |
|--|----------------------------|---|
| #1 (Call) | 0.74 (58.06) | -7.73 (-4.07) |
| #2 (Call) | 0.61 (39.00) | -3.96 (-2.69) |
| #1 (Quote) | 0.95 (162.00) | -0.80 (-0.90) |
| #2 (Quote) | 0.97 (192.30) | -0.60 (-1.10) |
| #3 (Quote) | 0.65 (44.59) | -0.54 (-1.53) |
| #4 (Quote) | 0.91 (108.69) | -0.49 (-0.36) |
| #5 (Quote) | 0.98 (249.05) | -0.47 (-1.41) |
| #6 (Quote) | 0.98 (249.33) | -0.24 (-0.54) |
| #7 (Quote) | 0.99 (338.65) | -0.09 (-0.40) |
| #8 (Quote) | 0.74 (55.88) | -0.06 (-0.32) |
| #9 (Quote) | 0.95 (159.60) | 0.00 (-0.11) |
| #10 (Quote) | 0.99 (321.38) | 0.04 (0.11) |
| #11 (Quote) | 0.98 (237.14) | 0.04 (0.08) |
| #12 (Quote) | 0.97 (193.90) | 0.06 (0.28) |
| #13 (Quote) | 1.00 (756.55) | 0.07 (0.64) |
| #14 (Quote) | 0.87 (86.92) | 0.12 (0.32) |
| #15 (Quote) | 0.80 (69.30) | 0.13 (0.48) |
| #16 (Quote) | 0.96 (184.35) | 0.15 (0.73) |
| #17 (Quote) | 0.91 (103.76) | 0.26 (0.40) |
| #18 (Quote) | 0.46 (26.90) | 0.48 (1.05) |
| #19 (Quote) | 0.93 (116.19) | 0.63 (0.75) |
| #20 (Quote) | 0.95 (145.09) | 0.70 (2.01) |
| Total Program Effect (looking only at Savings with t-value >1.5) | | 12.2 kWh/Degree |

These estimation results show that:

- Autocorrelation is clearly present in the data, with estimated ρ values often near one and in all cases very precisely estimated (i.e., high t-values).
- The vast majority of savings are due to the Call program (i.e., mandatory reductions), with very little savings occurring from the voluntary Quote participants.
- The overall statistically significant savings are 12.2 kWh/degree. At 93.5°, this implies an average savings per hour associated with the PowerShare event of 1,144 kWh for each hour of the PowerShare event.

APPENDIX

INDIVIDUAL ESTIMATED MODELS

Number of cross-sectional units 22.000000
 ID 70204801.

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2682
 R-squared: 0.526
 Standard Error of Estimate: 140.307
 Variance of White Noise Error (sigseq): 3776.153
 Variance of sigseq: 297807.722
 -2*log(likelihood): 29699.725

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|------------|------------|-----------|---------|
| CNST | 227.743696 | 130.829300 | 1.740770 | 0.082 |
| INTER | -1.330334 | 0.427411 | -3.112541 | 0.002 |
| JULY | 6.964873 | 8.809666 | 0.790594 | 0.429 |
| MAY | 24.348710 | 10.613582 | 2.294109 | 0.022 |
| JUNE | 3.044180 | 8.960419 | 0.339736 | 0.734 |
| TEMP | 2.778289 | 2.298992 | 1.208481 | 0.227 |
| HUMID | 0.102517 | 3.074584 | 0.033343 | 0.973 |
| TEMPHUM | -0.002400 | 0.032820 | -0.073135 | 0.942 |
| TLAG | 1.079080 | 1.990586 | 0.542091 | 0.588 |
| TLAG2 | -1.670157 | 1.992199 | -0.838348 | 0.402 |
| TLAG3 | -1.091589 | 1.976479 | -0.552290 | 0.581 |
| TLAG4 | 0.149843 | 1.967531 | 0.076158 | 0.939 |
| TLAG5 | 0.981437 | 1.448464 | 0.677571 | 0.498 |
| HLAG | 0.728918 | 2.492851 | 0.292403 | 0.770 |
| HLAG2 | -0.310095 | 2.494129 | -0.124330 | 0.901 |
| HLAG3 | -1.209322 | 1.784594 | -0.677645 | 0.498 |
| HOUR1 | 5.400548 | 24.596328 | 0.219567 | 0.826 |
| HOUR2 | 11.081496 | 23.741598 | 0.466754 | 0.641 |
| HOUR3 | -14.446484 | 23.315805 | -0.619600 | 0.536 |
| HOUR4 | -16.847038 | 23.157572 | -0.727496 | 0.467 |
| HOUR5 | -11.089286 | 22.932884 | -0.483554 | 0.629 |
| HOUR6 | 0.316005 | 22.667323 | 0.013941 | 0.989 |
| HOUR7 | -0.188506 | 22.204300 | -0.008490 | 0.993 |
| HOUR8 | -4.079476 | 21.368949 | -0.190907 | 0.849 |
| HOUR9 | 0.992770 | 20.450040 | 0.048546 | 0.961 |
| HOUR10 | -3.260096 | 19.430226 | -0.167785 | 0.867 |
| HOUR12 | -15.336533 | 19.166945 | -0.800155 | 0.424 |
| HOUR13 | -18.725193 | 19.530217 | -0.958781 | 0.338 |
| HOUR14 | -33.879676 | 20.016490 | -1.692588 | 0.091 |
| HOUR15 | -42.518889 | 20.686882 | -2.055355 | 0.040 |
| HOUR16 | -59.291036 | 21.401347 | -2.770435 | 0.006 |

| | | | | |
|---------|-------------|-----------|------------|-------|
| HOUR17 | -64.539484 | 21.992407 | -2.934626 | 0.003 |
| HOUR18 | -71.228737 | 22.683823 | -3.140068 | 0.002 |
| HOUR19 | -33.919404 | 23.539896 | -1.440933 | 0.150 |
| HOUR20 | -3.283509 | 24.580007 | -0.133585 | 0.894 |
| HOUR21 | 2.463888 | 25.458947 | 0.096779 | 0.923 |
| HOUR22 | 14.964462 | 26.055068 | 0.574340 | 0.566 |
| HOUR23 | 14.604839 | 25.913906 | 0.563591 | 0.573 |
| HOUR24 | 11.626543 | 25.432460 | 0.457154 | 0.648 |
| WEEKEND | -321.501069 | 6.166322 | -52.138226 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.898831 | 0.008463 | 106.204007 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 19685.951295 | 1.000000 |
| 1 | 17693.941815 | 0.898811 |

Total Time for Computation and Printing: 0.08 (seconds)
 Number of Iterations: 7

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2682
 R-squared: 0.936
 Standard Error of Estimate: 200.306
 Variance of White Noise Error (sig²): 2671.495
 Variance of sig²: 5322.064
 -2*log(likelihood): 28770.513

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|------------|------------|-----------|---------|
| CNST | 104.287444 | 219.751147 | 0.474571 | 0.635 |
| INTER | 0.064744 | 0.231026 | 0.280244 | 0.779 |
| JULY | -5.065739 | 42.964259 | -0.117906 | 0.906 |
| MAY | -33.216681 | 62.375143 | -0.532531 | 0.594 |
| JUNE | 4.756022 | 53.223559 | 0.089359 | 0.929 |
| TEMP | 2.317812 | 2.435241 | 0.951779 | 0.341 |
| HUMID | 1.363501 | 3.160677 | 0.431395 | 0.666 |
| TEMPHUM | -0.024183 | 0.040074 | -0.603477 | 0.546 |
| TLAG | 1.156851 | 0.531069 | 2.178345 | 0.029 |
| TLAG2 | -1.093910 | 0.531498 | -2.058165 | 0.040 |
| TLAG3 | -0.551447 | 0.530925 | -1.038652 | 0.299 |
| TLAG4 | -0.095600 | 0.523626 | -0.182573 | 0.855 |
| TLAG5 | 0.273245 | 0.523163 | 0.522294 | 0.602 |
| HLAG | 0.612700 | 0.650388 | 0.942054 | 0.346 |
| HLAG2 | -0.376675 | 0.650643 | -0.578927 | 0.563 |
| HLAG3 | 0.553359 | 0.651801 | 0.848969 | 0.396 |
| HOUR1 | -0.743000 | 15.880015 | -0.046788 | 0.963 |

| | | | | |
|---------|------------|-----------|-----------|-------|
| HOUR2 | 3.363961 | 15.461683 | 0.217568 | 0.828 |
| HOUR3 | -23.675874 | 15.320978 | -1.545324 | 0.122 |
| HOUR4 | -27.560893 | 15.313088 | -1.799826 | 0.072 |
| HOUR5 | -22.823379 | 15.255078 | -1.496117 | 0.135 |
| HOUR6 | -13.036030 | 15.095953 | -0.863545 | 0.388 |
| HOUR7 | -9.234609 | 14.166248 | -0.651874 | 0.515 |
| HOUR8 | -7.287286 | 12.234376 | -0.595640 | 0.551 |
| HOUR9 | 1.298464 | 9.502005 | 0.136652 | 0.891 |
| HOUR10 | -3.422931 | 6.018792 | -0.568707 | 0.570 |
| HOUR12 | -15.629065 | 6.115532 | -2.555635 | 0.011 |
| HOUR13 | -16.727964 | 9.816278 | -1.704105 | 0.088 |
| HOUR14 | -29.369557 | 12.886567 | -2.279083 | 0.023 |
| HOUR15 | -35.013407 | 15.351736 | -2.280746 | 0.023 |
| HOUR16 | -49.576257 | 17.167193 | -2.887849 | 0.004 |
| HOUR17 | -55.628971 | 18.395358 | -3.024077 | 0.003 |
| HOUR18 | -62.246270 | 19.114258 | -3.256536 | 0.001 |
| HOUR19 | -24.216473 | 19.379779 | -1.249574 | 0.212 |
| HOUR20 | 3.123343 | 19.247040 | 0.162277 | 0.871 |
| HOUR21 | 5.646637 | 18.882591 | 0.299039 | 0.765 |
| HOUR22 | 12.979257 | 18.352448 | 0.707222 | 0.479 |
| HOUR23 | 14.040505 | 17.515350 | 0.801611 | 0.423 |
| HOUR24 | 8.981736 | 16.602105 | 0.541000 | 0.589 |
| WEEKEND | -10.134108 | 9.214153 | -1.099842 | 0.272 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.966135 | 0.004983 | 193.903150 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 40122.663925 | 1.000000 |
| 1 | 38763.909130 | 0.966135 |

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

DEPENDENT VARIABLE:

KWH

Number of Observations: 2299

R-squared: 0.744

Standard Error of Estimate: 246.700

Variance of White Noise Error (sigsq): 21460.673

Variance of sigsq:3337450.938

-2*log(likelihood): 29453.412

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|------------|---------|
| CNST | 4616.976268 | 252.108092 | 18.313479 | 0.000 |
| INTER | 0.494279 | 0.764057 | 0.646913 | 0.518 |
| JULY | 1.421073 | 20.521144 | 0.069249 | 0.945 |
| MAY | -176.705897 | 23.683441 | -7.461158 | 0.000 |
| JUNE | -29.038693 | 20.939390 | -1.386797 | 0.166 |
| TEMP | -20.535079 | 4.458585 | -4.605739 | 0.000 |
| HUMID | -28.365384 | 6.025105 | -4.707865 | 0.000 |
| TEMPHUM | 0.385489 | 0.066072 | 5.834333 | 0.000 |
| TLAG | 3.709058 | 3.699340 | 1.002627 | 0.316 |
| TLAG2 | 4.556555 | 3.705571 | 1.229650 | 0.219 |
| TLAG3 | -2.070825 | 3.686289 | -0.561764 | 0.574 |
| TLAG4 | 0.802476 | 3.675025 | 0.218359 | 0.827 |
| TLAG5 | 4.689606 | 2.712638 | 1.728799 | 0.084 |
| HLAG | 2.738019 | 4.709876 | 0.581336 | 0.561 |
| HLAG2 | 1.745678 | 4.709215 | 0.370694 | 0.711 |
| HLAG3 | 6.275693 | 3.380081 | 1.856669 | 0.063 |
| HOUR1 | -599.844753 | 46.533484 | -12.890605 | 0.000 |
| HOUR2 | -688.649435 | 44.926180 | -15.328466 | 0.000 |
| HOUR3 | -552.644912 | 44.080599 | -12.537146 | 0.000 |
| HOUR4 | -581.137503 | 43.720666 | -13.292055 | 0.000 |
| HOUR5 | -417.719702 | 43.362092 | -9.633292 | 0.000 |
| HOUR6 | -404.072589 | 42.927247 | -9.412963 | 0.000 |
| HOUR7 | -318.536444 | 42.070240 | -7.571539 | 0.000 |
| HOUR8 | -118.132385 | 40.482218 | -2.918130 | 0.004 |
| HOUR9 | -86.814584 | 38.815169 | -2.236615 | 0.025 |
| HOUR10 | -45.731034 | 36.944348 | -1.237836 | 0.216 |
| HOUR12 | -105.797494 | 36.408843 | -2.905819 | 0.004 |
| HOUR13 | -62.626530 | 37.027810 | -1.691338 | 0.091 |
| HOUR14 | -21.181144 | 37.885036 | -0.559090 | 0.576 |
| HOUR15 | -47.272945 | 39.095242 | -1.209174 | 0.227 |
| HOUR16 | -146.645150 | 40.414944 | -3.628488 | 0.000 |
| HOUR17 | -247.163409 | 41.494021 | -5.956603 | 0.000 |
| HOUR18 | -386.866711 | 42.691166 | -9.061985 | 0.000 |
| HOUR19 | -482.687386 | 44.182259 | -10.924914 | 0.000 |
| HOUR20 | -557.903809 | 46.009752 | -12.125773 | 0.000 |
| HOUR21 | -481.587849 | 47.606879 | -10.115930 | 0.000 |
| HOUR22 | -525.439769 | 48.685296 | -10.792576 | 0.000 |
| HOUR23 | -498.509303 | 48.790807 | -10.217279 | 0.000 |
| HOUR24 | -526.823358 | 48.019668 | -10.970991 | 0.000 |
| WEEKEND | -583.044699 | 11.651286 | -50.041230 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|-----------|---------|
| 1 | 0.804279 | 0.012394 | 64.894157 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 60861.015214 | 1.000000 |
| 1 | 48967.095097 | 0.804572 |

Total Time for Computation and Printing: 0.11(seconds)

Number of Iterations: 12

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2299
 R-squared: 0.920
 Standard Error of Estimate: 328.683
 Variance of White Noise Error (sigsq): 19010.226
 Variance of sigsq:314387.735
 -2*log(likelihood): 29173.974

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|------------|---------|
| CNST | 3605.463658 | 536.033084 | 6.726196 | 0.000 |
| INTER | 0.256465 | 0.633293 | 0.404970 | 0.686 |
| JULY | 16.075048 | 84.381809 | 0.190504 | 0.849 |
| MAY | -105.500996 | 104.133930 | -1.013128 | 0.311 |
| JUNE | -26.846531 | 92.425065 | -0.290468 | 0.771 |
| TEMP | -9.209582 | 6.658721 | -1.383086 | 0.167 |
| HUMID | -12.104886 | 8.603854 | -1.406914 | 0.160 |
| TEMPHUM | 0.241032 | 0.111761 | 2.156670 | 0.031 |
| TLAG | 4.190639 | 1.507281 | 2.780263 | 0.005 |
| TLAG2 | 4.898324 | 1.516438 | 3.230150 | 0.001 |
| TLAG3 | -1.094747 | 1.503795 | -0.727989 | 0.467 |
| TLAG4 | 0.639347 | 1.493669 | 0.428038 | 0.669 |
| TLAG5 | -0.613992 | 1.493042 | -0.411235 | 0.681 |
| HLAG | 2.756147 | 1.833456 | 1.503252 | 0.133 |
| HLAG2 | 1.207777 | 1.833963 | 0.658562 | 0.510 |
| HLAG3 | 5.047834 | 1.854628 | 2.721750 | 0.007 |
| HOUR1 | -498.563402 | 45.312115 | -11.002872 | 0.000 |
| HOUR2 | -598.167141 | 43.848014 | -13.641830 | 0.000 |
| HOUR3 | -468.676230 | 43.149915 | -10.861579 | 0.000 |
| HOUR4 | -500.301091 | 42.876102 | -11.668530 | 0.000 |
| HOUR5 | -340.807174 | 42.484712 | -8.021878 | 0.000 |
| HOUR6 | -331.662531 | 41.789494 | -7.936505 | 0.000 |
| HOUR7 | -262.859073 | 39.075652 | -6.726927 | 0.000 |
| HOUR8 | -78.587995 | 33.696269 | -2.332246 | 0.020 |
| HOUR9 | -60.263645 | 26.344566 | -2.287517 | 0.022 |
| HOUR10 | -32.382277 | 17.042541 | -1.900085 | 0.058 |
| HOUR12 | -97.456596 | 17.218583 | -5.659966 | 0.000 |
| HOUR13 | -41.814791 | 26.866016 | -1.556419 | 0.120 |
| HOUR14 | 10.846366 | 34.785947 | 0.311803 | 0.755 |
| HOUR15 | -2.393659 | 41.212937 | -0.058080 | 0.954 |
| HOUR16 | -89.633655 | 46.007502 | -1.948240 | 0.052 |
| HOUR17 | -181.321663 | 49.360779 | -3.673395 | 0.000 |
| HOUR18 | -312.920829 | 51.438543 | -6.083392 | 0.000 |
| HOUR19 | -400.746400 | 52.413362 | -7.645882 | 0.000 |
| HOUR20 | -466.977863 | 52.437584 | -8.905404 | 0.000 |
| HOUR21 | -381.808730 | 51.997622 | -7.342811 | 0.000 |
| HOUR22 | -417.142967 | 51.195213 | -8.148085 | 0.000 |
| HOUR23 | -384.756171 | 49.547706 | -7.765368 | 0.000 |
| HOUR24 | -415.458289 | 47.356083 | -8.773071 | 0.000 |
| WEEKEND | -100.420345 | 25.557775 | -3.929150 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.907763 | 0.008749 | 103.759054 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 108032.835773 | 1.000000 |
| 1 | 98068.164845 | 0.907763 |

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2465
 R-squared: 0.295
 Standard Error of Estimate: 284.506
 Variance of White Noise Error (sig_{sq}): 3201.803
 Variance of sig_{sq}: 5492723.174
 -2*log(likelihood): 26888.288

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | p-Value |
|---------|-------------|------------|------------|---------|
| CNST | 2391.552279 | 274.231790 | 8.720916 | 0.000 |
| INTER | 1.855154 | 1.165260 | 1.592051 | 0.112 |
| JULY | -197.268988 | 19.131194 | -10.311379 | 0.000 |
| MAY | 5.546663 | 22.391198 | 0.247716 | 0.804 |
| JUNE | -107.465929 | 19.398236 | -5.539985 | 0.000 |
| TEMP | -13.034457 | 4.830415 | -2.698413 | 0.007 |
| HUMID | -28.970995 | 6.432364 | -4.503942 | 0.000 |
| TEMPHUM | 0.272356 | 0.069350 | 3.927248 | 0.000 |
| TLAG | 2.910941 | 4.169140 | 0.698211 | 0.485 |
| TLAG2 | 1.393480 | 4.171834 | 0.334021 | 0.738 |
| TLAG3 | 0.813145 | 4.147362 | 0.196063 | 0.845 |
| TLAG4 | 0.481359 | 4.134996 | 0.116411 | 0.907 |
| TLAG5 | 4.011742 | 3.039782 | 1.319747 | 0.187 |
| HLAG | 0.823176 | 5.115460 | 0.160919 | 0.872 |
| HLAG2 | 2.101369 | 5.115077 | 0.410819 | 0.681 |
| HLAG3 | 1.007357 | 3.672270 | 0.274314 | 0.784 |
| HOUR1 | -173.602404 | 51.810504 | -3.350718 | 0.001 |
| HOUR2 | -162.845483 | 49.979720 | -3.258231 | 0.001 |
| HOUR3 | -159.599196 | 49.054031 | -3.253539 | 0.001 |
| HOUR4 | -152.007048 | 48.660908 | -3.123802 | 0.002 |

| | | | | |
|---------|-------------|-----------|------------|-------|
| HOUR5 | -140.041798 | 48.268223 | -2.901325 | 0.004 |
| HOUR6 | -127.335486 | 47.727543 | -2.667967 | 0.008 |
| HOUR7 | -55.918050 | 46.766428 | -1.195688 | 0.232 |
| HOUR8 | -35.837688 | 45.080069 | -0.794979 | 0.427 |
| HOUR9 | -33.089674 | 43.250121 | -0.765077 | 0.444 |
| HOUR10 | -9.835028 | 41.123159 | -0.239160 | 0.811 |
| HOUR12 | -13.656377 | 40.512541 | -0.337090 | 0.736 |
| HOUR13 | -29.778316 | 41.240035 | -0.722073 | 0.470 |
| HOUR14 | -103.036273 | 42.216853 | -2.440643 | 0.015 |
| HOUR15 | -93.078766 | 43.594501 | -2.135103 | 0.033 |
| HOUR16 | -90.871970 | 45.095311 | -2.015109 | 0.044 |
| HOUR17 | -113.751559 | 46.314378 | -2.456074 | 0.014 |
| HOUR18 | -123.235788 | 47.715583 | -2.582716 | 0.010 |
| HOUR19 | -134.215869 | 49.412341 | -2.716242 | 0.007 |
| HOUR20 | -156.267214 | 51.467881 | -3.036208 | 0.002 |
| HOUR21 | -173.407315 | 53.295737 | -3.253681 | 0.001 |
| HOUR22 | -194.349692 | 54.418366 | -3.571399 | 0.000 |
| HOUR23 | -202.414320 | 54.329936 | -3.725650 | 0.000 |
| HOUR24 | -195.391311 | 53.467633 | -3.654385 | 0.000 |
| WEEKEND | -245.681127 | 12.939245 | -18.987284 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.980438 | 0.003964 | 247.309373 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 80943.529782 | 1.000000 |
| 1 | 79260.691778 | 0.979210 |

Total Time for Computation and Printing: 0.05 (seconds)
 Number of Iterations: 4

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2465
 R-squared: 0.980
 Standard Error of Estimate: 316.793
 Variance of White Noise Error (sigsq): 2339.259
 Variance of sigsq: 4439.866
 -2*log(likelihood): 26114.067

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|-------|-------------|------------|-----------|---------|
| CNST | 1068.734318 | 227.143536 | 4.705106 | 0.000 |
| INTER | 0.038721 | 0.365981 | 0.105801 | 0.916 |
| JULY | 17.975425 | 47.629192 | 0.377404 | 0.706 |
| MAY | 60.539384 | 80.119120 | 0.755617 | 0.450 |
| JUNE | 27.133643 | 65.885155 | 0.411832 | 0.680 |
| TEMP | -0.198344 | 2.363627 | -0.083915 | 0.933 |

| | | | | |
|---------|-------------|-----------|-----------|-------|
| HUMID | -3.684604 | 3.049653 | -1.208204 | 0.227 |
| TEMPHUM | 0.052399 | 0.038948 | 1.345351 | 0.179 |
| TLAG | 2.988366 | 0.510152 | 5.857791 | 0.000 |
| TLAG2 | 1.298766 | 0.509326 | 2.549967 | 0.011 |
| TLAG3 | 1.095707 | 0.507813 | 2.157697 | 0.031 |
| TLAG4 | 0.358886 | 0.504324 | 0.711618 | 0.477 |
| TLAG5 | -0.177693 | 0.503294 | -0.353059 | 0.724 |
| HLAG | 1.057471 | 0.617278 | 1.713118 | 0.087 |
| HLAG2 | 1.401222 | 0.617724 | 2.268363 | 0.023 |
| HLAG3 | 0.289459 | 0.618067 | 0.468329 | 0.640 |
| HOUR1 | -125.385538 | 15.268242 | -8.212179 | 0.000 |
| HOUR2 | -122.080010 | 14.856309 | -8.217385 | 0.000 |
| HOUR3 | -126.717794 | 14.731182 | -8.602011 | 0.000 |
| HOUR4 | -123.862392 | 14.736222 | -8.405302 | 0.000 |
| HOUR5 | -116.901178 | 14.701631 | -7.951579 | 0.000 |
| HOUR6 | -110.176002 | 14.568293 | -7.562726 | 0.000 |
| HOUR7 | -52.955488 | 13.660247 | -3.876613 | 0.000 |
| HOUR8 | -37.407149 | 11.807314 | -3.168134 | 0.002 |
| HOUR9 | -32.178443 | 9.177278 | -3.506317 | 0.000 |
| HOUR10 | -8.116669 | 5.814987 | -1.395819 | 0.163 |
| HOUR12 | 4.467073 | 5.928756 | 0.753459 | 0.451 |
| HOUR13 | 5.402089 | 9.517614 | 0.567589 | 0.570 |
| HOUR14 | -54.893067 | 12.494628 | -4.393333 | 0.000 |
| HOUR15 | -31.436966 | 14.881125 | -2.112540 | 0.035 |
| HOUR16 | -19.038921 | 16.637228 | -1.144357 | 0.253 |
| HOUR17 | -35.339573 | 17.832246 | -1.981779 | 0.048 |
| HOUR18 | -42.558247 | 18.491746 | -2.301473 | 0.021 |
| HOUR19 | -55.447746 | 18.717174 | -2.962399 | 0.003 |
| HOUR20 | -80.222966 | 18.542004 | -4.326553 | 0.000 |
| HOUR21 | -99.656950 | 18.155807 | -5.488985 | 0.000 |
| HOUR22 | -123.113792 | 17.605166 | -6.993049 | 0.000 |
| HOUR23 | -132.255490 | 16.799520 | -7.872575 | 0.000 |
| HOUR24 | -130.993918 | 15.949826 | -8.212875 | 0.000 |
| WEEKEND | -30.426372 | 8.888009 | -3.423306 | 0.001 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.988277 | 0.003075 | 321.383245 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 100357.728649 | 1.000000 |
| 1 | 99181.202566 | 0.988277 |

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2755
 R-squared: 0.481
 Standard Error of Estimate: 193.857
 Variance of White Noise Error (sigsq): 3461.600
 Variance of sigsq:1055685.999
 -2*log(likelihood): 30267.805

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|------------|---------|
| CNST | 1795.328500 | 178.296159 | 10.069362 | 0.000 |
| INTER | 0.892092 | 0.846798 | 1.053489 | 0.292 |
| JULY | 57.584341 | 11.683360 | 4.928748 | 0.000 |
| MAY | 61.873126 | 14.133128 | 4.377879 | 0.000 |
| JUNE | 165.442070 | 11.884204 | 13.921174 | 0.000 |
| TEMP | -10.369293 | 3.128422 | -3.314544 | 0.001 |
| HUMID | -17.888263 | 4.170127 | -4.289621 | 0.000 |
| TEMPHUM | 0.145255 | 0.044259 | 3.281899 | 0.001 |
| TLAG | -0.365764 | 2.715068 | -0.134716 | 0.893 |
| TLAG2 | 0.620465 | 2.717356 | 0.228334 | 0.819 |
| TLAG3 | -0.061386 | 2.693176 | -0.022793 | 0.982 |
| TLAG4 | 0.387282 | 2.678150 | 0.144608 | 0.885 |
| TLAG5 | 2.838571 | 1.975594 | 1.436819 | 0.151 |
| HLAG | -0.147205 | 3.415176 | -0.043103 | 0.966 |
| HLAG2 | 1.322593 | 3.414837 | 0.387308 | 0.699 |
| HLAG3 | 2.483853 | 2.442892 | 1.016768 | 0.309 |
| HOUR1 | -131.165621 | 33.466764 | -3.919280 | 0.000 |
| HOUR2 | -127.613264 | 32.325090 | -3.947808 | 0.000 |
| HOUR3 | -121.177387 | 31.738057 | -3.818047 | 0.000 |
| HOUR4 | -114.289667 | 31.532309 | -3.624526 | 0.000 |
| HOUR5 | -99.377388 | 31.216905 | -3.183448 | 0.001 |
| HOUR6 | -75.702348 | 30.853970 | -2.453569 | 0.014 |
| HOUR7 | -57.660201 | 30.235759 | -1.907020 | 0.057 |
| HOUR8 | -17.783139 | 29.122057 | -0.610642 | 0.541 |
| HOUR9 | -5.983352 | 27.863043 | -0.214742 | 0.830 |
| HOUR10 | 1.037422 | 26.475284 | 0.039185 | 0.969 |
| HOUR12 | -16.182793 | 26.131007 | -0.619295 | 0.536 |
| HOUR13 | -32.108011 | 26.623803 | -1.205989 | 0.228 |
| HOUR14 | -40.210024 | 27.285661 | -1.473669 | 0.141 |
| HOUR15 | -71.344764 | 28.187567 | -2.531072 | 0.011 |
| HOUR16 | -89.295221 | 29.156394 | -3.062629 | 0.002 |
| HOUR17 | -102.576689 | 29.969569 | -3.422695 | 0.001 |
| HOUR18 | -112.425360 | 30.893151 | -3.639168 | 0.000 |
| HOUR19 | -132.125769 | 32.046799 | -4.122901 | 0.000 |
| HOUR20 | -139.464976 | 33.454940 | -4.168741 | 0.000 |
| HOUR21 | -135.555904 | 34.673241 | -3.909525 | 0.000 |
| HOUR22 | -139.070199 | 35.370921 | -3.931766 | 0.000 |
| HOUR23 | -148.172878 | 35.276641 | -4.200311 | 0.000 |
| HOUR24 | -137.147134 | 34.585509 | -3.965451 | 0.000 |
| WEEKEND | -392.007288 | 8.456668 | -46.354818 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.952623 | 0.005795 | 164.395833 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 37580.401474 | 1.000000 |
| 1 | 35802.624067 | 0.952694 |

Total Time for Computation and Printing: 0.06(seconds)
 Number of Iterations: 5

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2755
 R-squared: 0.978
 Standard Error of Estimate: 262.049
 Variance of White Noise Error (sigsq): 1610.965
 Variance of sigsq: 1883.998
 -2*log(likelihood): 28159.140

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|------------|------------|-----------|---------|
| CNST | 925.988368 | 182.091256 | 5.085298 | 0.000 |
| INTER | -0.085675 | 0.216558 | -0.395622 | 0.692 |
| JULY | -8.218289 | 39.088786 | -0.210247 | 0.833 |
| MAY | 7.554334 | 65.513658 | 0.115309 | 0.908 |
| JUNE | 12.168348 | 53.848820 | 0.225972 | 0.821 |
| TEMP | -0.588315 | 1.869942 | -0.314617 | 0.753 |
| HUMID | -1.242956 | 2.431289 | -0.511234 | 0.609 |
| TEMPHUM | 0.015303 | 0.030760 | 0.497503 | 0.619 |
| TLAG | -0.102218 | 0.406736 | -0.251314 | 0.802 |
| TLAG2 | 0.704698 | 0.406491 | 1.733611 | 0.083 |
| TLAG3 | 0.259306 | 0.406023 | 0.638648 | 0.523 |
| TLAG4 | 0.041592 | 0.399487 | 0.104112 | 0.917 |
| TLAG5 | 0.231080 | 0.398959 | 0.579208 | 0.562 |
| HLAG | 0.053588 | 0.500775 | 0.107010 | 0.915 |
| HLAG2 | 0.456592 | 0.500994 | 0.911372 | 0.362 |
| HLAG3 | 0.297446 | 0.501277 | 0.593377 | 0.553 |
| HOUR1 | -73.545439 | 12.092746 | -6.081781 | 0.000 |
| HOUR2 | -75.827137 | 11.790249 | -6.431343 | 0.000 |
| HOUR3 | -72.411878 | 11.699438 | -6.189347 | 0.000 |
| HOUR4 | -66.630922 | 11.716631 | -5.686867 | 0.000 |
| HOUR5 | -54.190019 | 11.694116 | -4.633956 | 0.000 |
| HOUR6 | -32.324101 | 11.594154 | -2.787965 | 0.005 |
| HOUR7 | -28.739098 | 10.900724 | -2.636439 | 0.008 |
| HOUR8 | -0.061378 | 9.420707 | -0.006515 | 0.995 |
| HOUR9 | 5.841458 | 7.306853 | 0.799449 | 0.424 |
| HOUR10 | 7.288270 | 4.606369 | 1.582216 | 0.114 |
| HOUR12 | -9.271828 | 4.682434 | -1.980130 | 0.048 |
| HOUR13 | -17.287463 | 7.561670 | -2.286196 | 0.022 |
| HOUR14 | -20.046543 | 9.951117 | -2.014502 | 0.044 |

| HOUR15 | -44.047984 | 11.858227 | -3.714551 | 0.000 |
|---------|------------|-----------|-----------|-------|
| HOUR16 | -55.965861 | 13.264964 | -4.219074 | 0.000 |
| HOUR17 | -63.770663 | 14.214582 | -4.486285 | 0.000 |
| HOUR18 | -70.696734 | 14.753560 | -4.791842 | 0.000 |
| HOUR19 | -88.174250 | 14.939555 | -5.902067 | 0.000 |
| HOUR20 | -91.174391 | 14.810249 | -6.156169 | 0.000 |
| HOUR21 | -81.530808 | 14.499713 | -5.622926 | 0.000 |
| HOUR22 | -80.454284 | 14.030940 | -5.734062 | 0.000 |
| HOUR23 | -85.426439 | 13.357267 | -6.395503 | 0.000 |
| HOUR24 | -75.340106 | 12.641105 | -5.959930 | 0.000 |
| WEEKEND | -3.750524 | 7.136973 | -0.525506 | 0.599 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.988201 | 0.002918 | 338.645580 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 68669.678673 | 1.000000 |
| 1 | 67859.416049 | 0.988201 |

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

DEPENDENT VARIABLE:

KWH

Number of Observations: 2731
 R-squared: 0.809
 Standard Error of Estimate: 178.200
 Variance of White Noise Error (sigsq): 5369.351
 Variance of sigsq:760598.149
 -2*log(likelihood): 31203.555

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|------------|---------|
| CNST | 485.494753 | 164.645169 | 2.948734 | 0.003 |
| INTER | -1.245200 | 0.723701 | -1.720599 | 0.085 |
| JULY | -68.088278 | 10.746639 | -6.335774 | 0.000 |
| MAY | -133.556263 | 13.201981 | -10.116381 | 0.000 |
| JUNE | -71.255926 | 10.931040 | -6.518677 | 0.000 |
| TEMP | 17.873318 | 2.890201 | 6.184110 | 0.000 |
| HUMID | 16.757478 | 3.844198 | 4.359161 | 0.000 |
| TEMPHUM | -0.228952 | 0.040839 | -5.606168 | 0.000 |
| TLAG | 3.135184 | 2.498460 | 1.254847 | 0.210 |

| | | | | |
|---------|-------------|-----------|------------|-------|
| TLAG2 | 1.347801 | 2.499290 | 0.539274 | 0.590 |
| TLAG3 | 0.323394 | 2.477843 | 0.130514 | 0.896 |
| TLAG4 | 1.582128 | 2.467271 | 0.641246 | 0.521 |
| TLAG5 | 2.667122 | 1.817986 | 1.467075 | 0.142 |
| HLAG | 0.810008 | 3.145192 | 0.257538 | 0.797 |
| HLAG2 | 0.392176 | 3.145032 | 0.124697 | 0.901 |
| HLAG3 | 3.617335 | 2.250277 | 1.607507 | 0.108 |
| HOUR1 | -507.434956 | 30.814071 | -16.467638 | 0.000 |
| HOUR2 | -652.380794 | 29.776584 | -21.909189 | 0.000 |
| HOUR3 | -686.571493 | 29.235907 | -23.483845 | 0.000 |
| HOUR4 | -576.266100 | 29.047996 | -19.838412 | 0.000 |
| HOUR5 | -335.121492 | 28.780024 | -11.644240 | 0.000 |
| HOUR6 | -212.806051 | 28.446276 | -7.480981 | 0.000 |
| HOUR7 | -147.703839 | 27.873729 | -5.299034 | 0.000 |
| HOUR8 | -84.238110 | 26.833766 | -3.139258 | 0.002 |
| HOUR9 | -49.730254 | 25.663781 | -1.937760 | 0.053 |
| HOUR10 | -6.725726 | 24.411294 | -0.275517 | 0.783 |
| HOUR12 | -31.191192 | 24.117520 | -1.293300 | 0.196 |
| HOUR13 | -35.615994 | 24.569135 | -1.449623 | 0.147 |
| HOUR14 | -51.253624 | 25.184254 | -2.035146 | 0.042 |
| HOUR15 | -103.000119 | 26.003828 | -3.960960 | 0.000 |
| HOUR16 | -178.703394 | 26.893276 | -6.644910 | 0.000 |
| HOUR17 | -233.360550 | 27.635280 | -8.444298 | 0.000 |
| HOUR18 | -264.703108 | 28.479187 | -9.294616 | 0.000 |
| HOUR19 | -288.197099 | 29.534694 | -9.757917 | 0.000 |
| HOUR20 | -336.702579 | 30.824332 | -10.923272 | 0.000 |
| HOUR21 | -324.400376 | 31.931951 | -10.159115 | 0.000 |
| HOUR22 | -358.725679 | 32.573726 | -11.012731 | 0.000 |
| HOUR23 | -384.765896 | 32.484691 | -11.844530 | 0.000 |
| HOUR24 | -438.436167 | 31.849459 | -13.765891 | 0.000 |
| WEEKEND | -479.032422 | 7.782673 | -61.551146 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.911548 | 0.007868 | 115.849294 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 31755.246038 | 1.000000 |
| 1 | 28935.655981 | 0.911209 |

Total Time for Computation and Printing: 0.09(seconds)
 Number of Iterations: 8

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2731
 R-squared: 0.980
 Standard Error of Estimate: 278.733
 Variance of White Noise Error (sigsq): 3269.496
 Variance of sigsq: 7828.343
 -2*log(likelihood): 29847.394

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|------------|---------|
| CNST | 1340.134628 | 247.255566 | 5.420038 | 0.000 |
| INTER | -0.236686 | 0.434304 | -0.544978 | 0.586 |
| JULY | -11.839424 | 52.253699 | -0.226576 | 0.821 |
| MAY | -26.626046 | 82.523370 | -0.322649 | 0.747 |
| JUNE | -54.253362 | 68.747287 | -0.789171 | 0.430 |
| TEMP | 9.026767 | 2.665182 | 3.386923 | 0.001 |
| HUMID | 6.836190 | 3.452906 | 1.979836 | 0.048 |
| TEMPHUM | -0.096821 | 0.043742 | -2.213484 | 0.027 |
| TLAG | 3.545910 | 0.580058 | 6.113029 | 0.000 |
| TLAG2 | 2.209166 | 0.579227 | 3.813991 | 0.000 |
| TLAG3 | 0.512965 | 0.577558 | 0.888161 | 0.375 |
| TLAG4 | 1.100712 | 0.571167 | 1.927130 | 0.054 |
| TLAG5 | 0.067850 | 0.570454 | 0.118941 | 0.905 |
| HLAG | 1.173627 | 0.715258 | 1.640846 | 0.101 |
| HLAG2 | 0.220294 | 0.715633 | 0.307832 | 0.758 |
| HLAG3 | -0.880889 | 0.716329 | -1.229728 | 0.219 |
| HOUR1 | -485.171476 | 17.287730 | -28.064498 | 0.000 |
| HOUR2 | -638.057462 | 16.842585 | -37.883583 | 0.000 |
| HOUR3 | -678.201450 | 16.693429 | -40.626850 | 0.000 |
| HOUR4 | -571.806681 | 16.701312 | -34.237231 | 0.000 |
| HOUR5 | -333.723198 | 16.662285 | -20.028657 | 0.000 |
| HOUR6 | -213.400539 | 16.498285 | -12.934711 | 0.000 |
| HOUR7 | -145.600362 | 15.509710 | -9.387691 | 0.000 |
| HOUR8 | -82.061140 | 13.413503 | -6.117801 | 0.000 |
| HOUR9 | -49.550396 | 10.413402 | -4.758329 | 0.000 |
| HOUR10 | -5.481323 | 6.580995 | -0.832902 | 0.405 |
| HOUR12 | -28.008954 | 6.696703 | -4.182499 | 0.000 |
| HOUR13 | -24.031417 | 10.783534 | -2.228529 | 0.026 |
| HOUR14 | -31.168375 | 14.180511 | -2.197973 | 0.028 |
| HOUR15 | -78.632722 | 16.896463 | -4.653798 | 0.000 |
| HOUR16 | -149.167427 | 18.896571 | -7.893889 | 0.000 |
| HOUR17 | -199.985093 | 20.251075 | -9.875283 | 0.000 |
| HOUR18 | -232.474139 | 21.023634 | -11.057752 | 0.000 |
| HOUR19 | -256.431638 | 21.301397 | -12.038255 | 0.000 |
| HOUR20 | -307.129375 | 21.131324 | -14.534318 | 0.000 |
| HOUR21 | -293.822840 | 20.701844 | -14.193076 | 0.000 |
| HOUR22 | -325.064531 | 20.047155 | -16.214996 | 0.000 |
| HOUR23 | -350.490927 | 19.097478 | -18.352734 | 0.000 |
| HOUR24 | -407.841163 | 18.080773 | -22.556622 | 0.000 |
| WEEKEND | -50.688029 | 10.188547 | -4.975001 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.978732 | 0.003925 | 249.328897 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 77692.006220 | 1.000000 |
| 1 | 76039.687935 | 0.978732 |

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2563
 R-squared: 0.917
 Standard Error of Estimate: 404.284
 Variance of White Noise Error (sigsq):105115.392
 Variance of sigsq:21512437.067
 -2*log(likelihood): 36908.530

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|--------------|------------|------------|---------|
| CNST | 13254.780066 | 381.566714 | 34.737779 | 0.000 |
| INTER | -5.520372 | 1.234207 | -4.472810 | 0.000 |
| JULY | -169.954253 | 26.962406 | -6.303379 | 0.000 |
| MAY | -437.538150 | 31.987608 | -13.678364 | 0.000 |
| JUNE | -286.295344 | 27.452567 | -10.428728 | 0.000 |
| TEMP | -104.431431 | 6.728075 | -15.521739 | 0.000 |
| HUMID | -147.183304 | 9.012269 | -16.331436 | 0.000 |
| TEMPHUM | 2.216140 | 0.096556 | 22.951757 | 0.000 |
| TLAG | 19.659481 | 5.815104 | 3.380762 | 0.001 |
| TLAG2 | 6.636069 | 5.820706 | 1.140080 | 0.254 |
| TLAG3 | -5.547155 | 5.776257 | -0.960337 | 0.337 |
| TLAG4 | 9.338162 | 5.750963 | 1.623756 | 0.105 |
| TLAG5 | 7.739075 | 4.228588 | 1.830179 | 0.067 |
| HLAG | 13.859932 | 7.291031 | 1.900956 | 0.057 |
| HLAG2 | 7.779829 | 7.289516 | 1.067263 | 0.286 |
| HLAG3 | 2.244692 | 5.225138 | 0.429595 | 0.668 |
| HOUR1 | -1771.928660 | 71.959012 | -24.624138 | 0.000 |
| HOUR2 | -1725.183073 | 69.448209 | -24.841290 | 0.000 |
| HOUR3 | -1527.321483 | 68.239873 | -22.381658 | 0.000 |
| HOUR4 | -971.714694 | 67.757840 | -14.340993 | 0.000 |
| HOUR5 | -272.038856 | 67.082816 | -4.055269 | 0.000 |
| HOUR6 | 134.122858 | 66.359892 | 2.021143 | 0.043 |
| HOUR7 | 412.023371 | 65.064069 | 6.332579 | 0.000 |
| HOUR8 | 427.817311 | 62.697443 | 6.823521 | 0.000 |
| HOUR9 | 132.620632 | 60.194693 | 2.203195 | 0.028 |
| HOUR10 | 47.640921 | 57.297497 | 0.831466 | 0.406 |
| HOUR12 | 129.424296 | 56.510106 | 2.290286 | 0.022 |
| HOUR13 | 353.246221 | 57.478409 | 6.145720 | 0.000 |
| HOUR14 | 712.377773 | 58.838349 | 12.107372 | 0.000 |
| HOUR15 | 942.748344 | 60.719546 | 15.526275 | 0.000 |
| HOUR16 | 825.325385 | 62.779335 | 13.146450 | 0.000 |
| HOUR17 | 627.802626 | 64.476399 | 9.736937 | 0.000 |

| | | | | |
|---------|--------------|-----------|------------|-------|
| HOUR18 | 744.608484 | 66.422203 | 11.210235 | 0.000 |
| HOUR19 | 640.012903 | 68.818321 | 9.300037 | 0.000 |
| HOUR20 | 259.037206 | 71.768697 | 3.609334 | 0.000 |
| HOUR21 | -182.714464 | 74.266314 | -2.460260 | 0.014 |
| HOUR22 | -741.723942 | 75.788687 | -9.786737 | 0.000 |
| HOUR23 | -1348.461014 | 75.658336 | -17.823033 | 0.000 |
| HOUR24 | -1761.071312 | 74.314931 | -23.697409 | 0.000 |
| WEEKEND | -351.397757 | 18.309403 | -19.192201 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|-----------|---------|
| 1 | 0.597172 | 0.015844 | 37.691001 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 163445.420206 | 1.000000 |
| 1 | 97639.045788 | 0.597380 |

Total Time for Computation and Printing: 0.08 (seconds)
 Number of Iterations: 6

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2563
 R-squared: 0.947
 Standard Error of Estimate: 407.609
 Variance of White Noise Error (sig_{sq}): 104274.420
 Variance of sig_{sq}: 8484709.103
 -2*log(likelihood): 36887.918

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|--------------|------------|------------|---------|
| CNST | 11287.897005 | 670.013635 | 16.847265 | 0.000 |
| INTER | -3.967952 | 1.472941 | -2.693897 | 0.007 |
| JULY | -216.569418 | 52.843148 | -4.098344 | 0.000 |
| MAY | -469.696933 | 63.266636 | -7.424086 | 0.000 |
| JUNE | -337.709687 | 53.993739 | -6.254608 | 0.000 |
| TEMP | -79.836301 | 10.037535 | -7.953775 | 0.000 |
| HUMID | -111.586425 | 13.269593 | -8.409182 | 0.000 |
| TEMPHUM | 1.676828 | 0.165112 | 10.155719 | 0.000 |
| TLAG | 21.292750 | 3.557830 | 5.984757 | 0.000 |
| TLAG2 | 8.838600 | 3.644664 | 2.425080 | 0.015 |
| TLAG3 | -5.479393 | 3.625721 | -1.511256 | 0.131 |
| TLAG4 | 10.148418 | 3.508391 | 2.892613 | 0.004 |
| TLAG5 | 6.037500 | 3.348210 | 1.803202 | 0.071 |
| HLAG | 19.393157 | 4.343365 | 4.465008 | 0.000 |
| HLAG2 | 12.667378 | 4.339738 | 2.918927 | 0.004 |
| HLAG3 | -3.991006 | 4.132110 | -0.965852 | 0.334 |
| HOUR1 | -1816.814117 | 82.225405 | -22.095533 | 0.000 |
| HOUR2 | -1772.532726 | 78.808473 | -22.491652 | 0.000 |

| | | | | |
|---------|--------------|-----------|------------|-------|
| HOUR3 | -1578.072035 | 77.016524 | -20.490045 | 0.000 |
| HOUR4 | -1025.350165 | 76.133299 | -13.467828 | 0.000 |
| HOUR5 | -326.805900 | 75.051617 | -4.354415 | 0.000 |
| HOUR6 | 79.182956 | 73.687701 | 1.074575 | 0.283 |
| HOUR7 | 370.872509 | 69.798969 | 5.313438 | 0.000 |
| HOUR8 | 403.045974 | 62.112009 | 6.489018 | 0.000 |
| HOUR9 | 112.723048 | 51.799378 | 2.176147 | 0.030 |
| HOUR10 | 42.349724 | 37.441991 | 1.131076 | 0.258 |
| HOUR12 | 118.582607 | 36.703327 | 3.230841 | 0.001 |
| HOUR13 | 346.581006 | 49.286634 | 7.031947 | 0.000 |
| HOUR14 | 711.291963 | 58.021551 | 12.259100 | 0.000 |
| HOUR15 | 931.896984 | 64.995294 | 14.337915 | 0.000 |
| HOUR16 | 811.327255 | 70.597966 | 11.492219 | 0.000 |
| HOUR17 | 615.122422 | 74.778259 | 8.225953 | 0.000 |
| HOUR18 | 728.945028 | 78.241457 | 9.316609 | 0.000 |
| HOUR19 | 619.988992 | 81.545731 | 7.602961 | 0.000 |
| HOUR20 | 228.886536 | 85.234263 | 2.685382 | 0.007 |
| HOUR21 | -225.435987 | 88.577235 | -2.545078 | 0.011 |
| HOUR22 | -786.337792 | 90.489092 | -8.689863 | 0.000 |
| HOUR23 | -1390.861879 | 89.413324 | -15.555421 | 0.000 |
| HOUR24 | -1805.010606 | 86.185536 | -20.943312 | 0.000 |
| WEEKEND | -299.672899 | 33.355999 | -8.984078 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|-----------|---------|
| 1 | 0.610236 | 0.015648 | 38.996603 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 166144.793486 | 1.000000 |
| 1 | 101387.575110 | 0.610236 |

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2755
 R-squared: 0.739
 Standard Error of Estimate: 78.909
 Variance of White Noise Error (sigsq): 3647.901
 Variance of sigsq: 28981.610
 -2*log(likelihood): 30414.071

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|------------|---------|
| CNST | 755.588160 | 72.575314 | 10.411090 | 0.000 |
| INTER | -0.276112 | 0.344689 | -0.801048 | 0.423 |
| JULY | -36.849006 | 4.755703 | -7.748383 | 0.000 |
| MAY | -38.217163 | 5.752879 | -6.643137 | 0.000 |
| JUNE | -44.281365 | 4.837456 | -9.153854 | 0.000 |
| TEMP | 2.357351 | 1.273422 | 1.851194 | 0.064 |
| HUMID | 4.165008 | 1.697447 | 2.453690 | 0.014 |
| TEMPHUM | -0.047523 | 0.018016 | -2.637850 | 0.008 |
| TLAG | -0.478436 | 1.105166 | -0.432908 | 0.665 |
| TLAG2 | -3.880956 | 1.106098 | -3.508692 | 0.000 |
| TLAG3 | -2.257120 | 1.096255 | -2.058936 | 0.040 |
| TLAG4 | 0.750071 | 1.090139 | 0.688050 | 0.491 |
| TLAG5 | 1.607018 | 0.804164 | 1.998372 | 0.046 |
| HLAG | 1.076620 | 1.390145 | 0.774466 | 0.439 |
| HLAG2 | -0.946753 | 1.390007 | -0.681114 | 0.496 |
| HLAG3 | 3.118252 | 0.994377 | 3.135885 | 0.002 |
| HOUR1 | -178.299915 | 13.622621 | -13.088518 | 0.000 |
| HOUR2 | -259.140494 | 13.157903 | -19.694665 | 0.000 |
| HOUR3 | -306.702222 | 12.918952 | -23.740488 | 0.000 |
| HOUR4 | -368.780438 | 12.835202 | -28.731955 | 0.000 |
| HOUR5 | -402.257874 | 12.706817 | -31.656855 | 0.000 |
| HOUR6 | -414.631926 | 12.559085 | -33.014502 | 0.000 |
| HOUR7 | -365.145636 | 12.307442 | -29.668686 | 0.000 |
| HOUR8 | -261.867060 | 11.854111 | -22.090822 | 0.000 |
| HOUR9 | -156.862606 | 11.341630 | -13.830693 | 0.000 |
| HOUR10 | -93.167363 | 10.776744 | -8.645224 | 0.000 |
| HOUR12 | 33.284524 | 10.636606 | 3.129243 | 0.002 |
| HOUR13 | 70.578346 | 10.837199 | 6.512601 | 0.000 |
| HOUR14 | 57.268489 | 11.106607 | 5.156254 | 0.000 |
| HOUR15 | 37.530026 | 11.473727 | 3.270953 | 0.001 |
| HOUR16 | 10.798781 | 11.868088 | 0.909901 | 0.363 |
| HOUR17 | 3.926822 | 12.199090 | 0.321895 | 0.748 |
| HOUR18 | -1.734322 | 12.575033 | -0.137918 | 0.890 |
| HOUR19 | -2.173283 | 13.044625 | -0.166604 | 0.868 |
| HOUR20 | 5.031668 | 13.617808 | 0.369492 | 0.712 |
| HOUR21 | 1.409176 | 14.113716 | 0.099844 | 0.920 |
| HOUR22 | -4.425035 | 14.397706 | -0.307343 | 0.759 |
| HOUR23 | -27.624158 | 14.359330 | -1.923778 | 0.054 |
| HOUR24 | -93.029609 | 14.078005 | -6.608153 | 0.000 |
| WEEKEND | -30.111924 | 3.442280 | -8.747668 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|-----------|---------|
| 1 | 0.643416 | 0.014585 | 44.116214 | +DEN |

AUTOCORRELATIONS AND AUTOCOVIARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 6226.661983 | 1.000000 |
| 1 | 4006.466312 | 0.643437 |

Total Time for Computation and Printing: 0.06(seconds)

Number of Iterations: 6

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2755
 R-squared: 0.848
 Standard Error of Estimate: 79.148
 Variance of White Noise Error (sigsq): 3638.456
 Variance of sigsq: 9610.428
 -2*log(likelihood): 30406.920

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|------------|---------|
| CNST | 866.536985 | 131.541349 | 6.587563 | 0.000 |
| INTER | -0.540375 | 0.353135 | -1.530222 | 0.126 |
| JULY | -32.795096 | 9.855788 | -3.327496 | 0.001 |
| MAY | -35.052134 | 12.020521 | -2.916025 | 0.004 |
| JUNE | -42.287028 | 10.071201 | -4.198807 | 0.000 |
| TEMP | 0.691557 | 1.932941 | 0.357775 | 0.721 |
| HUMID | 2.168462 | 2.549415 | 0.850572 | 0.395 |
| TEMPHUM | -0.014177 | 0.031756 | -0.446440 | 0.655 |
| TLAG | -0.439379 | 0.641419 | -0.685011 | 0.493 |
| TLAG2 | -3.824770 | 0.656300 | -5.827780 | 0.000 |
| TLAG3 | -2.321485 | 0.652433 | -3.558199 | 0.000 |
| TLAG4 | 0.682994 | 0.630820 | 1.082709 | 0.279 |
| TLAG5 | 1.736861 | 0.609332 | 2.850433 | 0.004 |
| HLAG | 1.342072 | 0.780844 | 1.718746 | 0.086 |
| HLAG2 | -0.612516 | 0.780374 | -0.784901 | 0.433 |
| HLAG3 | 2.017396 | 0.751880 | 2.683135 | 0.007 |
| HOUR1 | -176.493787 | 15.425902 | -11.441392 | 0.000 |
| HOUR2 | -256.998733 | 14.807508 | -17.355975 | 0.000 |
| HOUR3 | -304.177715 | 14.464299 | -21.029551 | 0.000 |
| HOUR4 | -365.873167 | 14.301576 | -25.582717 | 0.000 |
| HOUR5 | -398.998894 | 14.092311 | -28.313234 | 0.000 |
| HOUR6 | -411.321652 | 13.807989 | -29.788673 | 0.000 |
| HOUR7 | -362.541855 | 13.047172 | -27.787006 | 0.000 |
| HOUR8 | -260.703913 | 11.529657 | -22.611593 | 0.000 |
| HOUR9 | -156.950095 | 9.475297 | -16.564135 | 0.000 |
| HOUR10 | -93.105571 | 6.722846 | -13.849130 | 0.000 |
| HOUR12 | 33.259925 | 6.592713 | 5.044953 | 0.000 |
| HOUR13 | 70.380770 | 9.036290 | 7.788680 | 0.000 |
| HOUR14 | 57.015518 | 10.795696 | 5.281319 | 0.000 |
| HOUR15 | 36.595802 | 12.210950 | 2.996966 | 0.003 |
| HOUR16 | 9.606807 | 13.333532 | 0.720500 | 0.471 |
| HOUR17 | 3.098288 | 14.171595 | 0.218627 | 0.827 |
| HOUR18 | -3.169965 | 14.848388 | -0.213489 | 0.831 |
| HOUR19 | -4.249977 | 15.485956 | -0.274441 | 0.784 |
| HOUR20 | 2.902435 | 16.163590 | 0.179566 | 0.858 |
| HOUR21 | -0.031645 | 16.778222 | -0.001886 | 0.998 |
| HOUR22 | -4.927639 | 17.083589 | -0.288443 | 0.773 |
| HOUR23 | -27.131379 | 16.834198 | -1.611682 | 0.107 |
| HOUR24 | -91.739698 | 16.182194 | -5.669175 | 0.000 |
| WEEKEND | -19.136315 | 6.461608 | -2.961541 | 0.003 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|-----------|---------|
| 1 | 0.647444 | 0.014520 | 44.590674 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 6264.389324 | 1.000000 |
| 1 | 4055.843523 | 0.647444 |

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

DEPENDENT VARIABLE:

KWH

Number of Observations: 2751

R-squared: 0.679

Standard Error of Estimate: 413.795

Variance of White Noise Error (sigsq): 24690.349

Variance of sigsq:21948314.056

-2*log(likelihood): 35629.131

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|------------|---------|
| CNST | 3368.229513 | 384.614049 | 8.757427 | 0.000 |
| INTER | 0.228029 | 1.258810 | 0.181147 | 0.856 |
| JULY | -273.691360 | 24.957495 | -10.966299 | 0.000 |
| MAY | -27.703221 | 30.160945 | -0.918513 | 0.358 |
| JUNE | 39.039079 | 25.360288 | 1.539378 | 0.124 |
| TEMP | -28.269750 | 6.709269 | -4.213537 | 0.000 |
| HUMID | -46.814676 | 8.988629 | -5.208211 | 0.000 |
| TEMPHUM | 0.593350 | 0.095813 | 6.192793 | 0.000 |
| TLAG | 6.913740 | 5.767152 | 1.198813 | 0.231 |
| TLAG2 | 2.351728 | 5.770053 | 0.407575 | 0.684 |
| TLAG3 | 0.260877 | 5.717180 | 0.045630 | 0.964 |
| TLAG4 | 3.241852 | 5.690225 | 0.569723 | 0.569 |
| TLAG5 | 2.578497 | 4.186763 | 0.615869 | 0.538 |
| HLAG | 1.155582 | 7.289777 | 0.158521 | 0.874 |
| HLAG2 | 2.526078 | 7.288714 | 0.346574 | 0.729 |
| HLAG3 | 4.189472 | 5.214493 | 0.803428 | 0.422 |
| HOUR1 | -670.463539 | 71.493405 | -9.377977 | 0.000 |
| HOUR2 | -627.305173 | 69.082313 | -9.080547 | 0.000 |
| HOUR3 | -655.529937 | 67.846995 | -9.661886 | 0.000 |
| HOUR4 | -478.845383 | 67.423904 | -7.102012 | 0.000 |
| HOUR5 | -367.954891 | 66.760818 | -5.511540 | 0.000 |

| | | | | |
|---------|--------------|-----------|------------|-------|
| HOUR6 | -322.772979 | 65.992024 | -4.891091 | 0.000 |
| HOUR7 | -103.166031 | 64.649044 | -1.595786 | 0.111 |
| HOUR8 | 23.605283 | 62.326396 | 0.378737 | 0.705 |
| HOUR9 | -6.748544 | 59.644448 | -0.113146 | 0.910 |
| HOUR10 | 36.443942 | 56.729459 | 0.642417 | 0.521 |
| HOUR12 | -70.401582 | 55.874764 | -1.259989 | 0.208 |
| HOUR13 | -67.159598 | 56.891937 | -1.180477 | 0.238 |
| HOUR14 | -156.795947 | 58.285950 | -2.690116 | 0.007 |
| HOUR15 | -558.390805 | 60.198041 | -9.275897 | 0.000 |
| HOUR16 | -839.603072 | 62.277312 | -13.481685 | 0.000 |
| HOUR17 | -1014.695515 | 64.053635 | -15.841342 | 0.000 |
| HOUR18 | -1105.497815 | 66.017417 | -16.745548 | 0.000 |
| HOUR19 | -1154.385732 | 68.453842 | -16.863710 | 0.000 |
| HOUR20 | -1105.783838 | 71.447622 | -15.476846 | 0.000 |
| HOUR21 | -971.108088 | 74.032626 | -13.117299 | 0.000 |
| HOUR22 | -890.270202 | 75.507041 | -11.790559 | 0.000 |
| HOUR23 | -718.975980 | 75.296266 | -9.548627 | 0.000 |
| HOUR24 | -683.089188 | 73.840698 | -9.250850 | 0.000 |
| WEEKEND | -907.011663 | 18.065744 | -50.206161 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.925653 | 0.007214 | 128.313339 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 171226.037930 | 1.000000 |
| 1 | 158247.712141 | 0.924204 |

Total Time for Computation and Printing: 0.09(seconds)
 Number of Iterations: 7

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2751
 R-squared: 0.970
 Standard Error of Estimate: 585.539
 Variance of White Noise Error (sig²): 15990.064
 Variance of sig²: 185883.059
 -2*log(likelihood): 34432.852

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|-------|-------------|------------|-----------|---------|
| CNST | 1722.930906 | 543.658988 | 3.169139 | 0.002 |
| INTER | 0.042917 | 0.562146 | 0.076345 | 0.939 |
| JULY | -7.556049 | 113.435944 | -0.066611 | 0.947 |
| MAY | 33.154643 | 175.675038 | 0.188727 | 0.850 |
| JUNE | 32.925807 | 147.296422 | 0.223534 | 0.823 |
| TEMP | -10.254986 | 5.870219 | -1.746951 | 0.081 |
| HUMID | -20.383669 | 7.623220 | -2.673892 | 0.008 |

| | | | | |
|---------|--------------|-----------|------------|-------|
| TEMPHUM | 0.288471 | 0.096497 | 2.989444 | 0.003 |
| TLAG | 7.055903 | 1.267107 | 5.568514 | 0.000 |
| TLAG2 | 2.484319 | 1.267001 | 1.960787 | 0.050 |
| TLAG3 | 0.473904 | 1.267917 | 0.373766 | 0.709 |
| TLAG4 | 1.864584 | 1.253322 | 1.487713 | 0.137 |
| TLAG5 | 1.817103 | 1.251957 | 1.451410 | 0.147 |
| HLAG | 1.818400 | 1.578881 | 1.151702 | 0.250 |
| HLAG2 | 1.625331 | 1.578849 | 1.029440 | 0.303 |
| HLAG3 | 2.001559 | 1.581120 | 1.265912 | 0.206 |
| HOUR1 | -636.197207 | 37.998734 | -16.742590 | 0.000 |
| HOUR2 | -596.660220 | 36.936668 | -16.153602 | 0.000 |
| HOUR3 | -626.333498 | 36.530156 | -17.145656 | 0.000 |
| HOUR4 | -450.807518 | 36.452720 | -12.366910 | 0.000 |
| HOUR5 | -342.045143 | 36.238022 | -9.438847 | 0.000 |
| HOUR6 | -299.048684 | 35.777071 | -8.358669 | 0.000 |
| HOUR7 | -88.230622 | 33.393958 | -2.642113 | 0.008 |
| HOUR8 | 18.672318 | 28.876422 | 0.646629 | 0.518 |
| HOUR9 | -10.019271 | 22.503139 | -0.445239 | 0.656 |
| HOUR10 | 34.798177 | 14.341373 | 2.426419 | 0.015 |
| HOUR12 | -47.415752 | 14.614032 | -3.244536 | 0.001 |
| HOUR13 | -38.054345 | 23.523357 | -1.617726 | 0.106 |
| HOUR14 | -124.308693 | 30.949330 | -4.016523 | 0.000 |
| HOUR15 | -524.188961 | 36.931332 | -14.193611 | 0.000 |
| HOUR16 | -802.841270 | 41.383996 | -19.399801 | 0.000 |
| HOUR17 | -975.239206 | 44.431755 | -21.949149 | 0.000 |
| HOUR18 | -1063.954429 | 46.154005 | -23.052267 | 0.000 |
| HOUR19 | -1112.162836 | 46.790333 | -23.769073 | 0.000 |
| HOUR20 | -1061.723038 | 46.461420 | -22.851713 | 0.000 |
| HOUR21 | -925.645580 | 45.576897 | -20.309535 | 0.000 |
| HOUR22 | -844.116796 | 44.169416 | -19.110889 | 0.000 |
| HOUR23 | -671.160086 | 42.071859 | -15.952708 | 0.000 |
| HOUR24 | -637.918572 | 39.789524 | -16.032325 | 0.000 |
| WEEKEND | -22.439573 | 22.537267 | -0.995665 | 0.320 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.976403 | 0.004117 | 237.140096 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 342855.949625 | 1.000000 |
| 1 | 334765.460584 | 0.976403 |

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2755
 R-squared: 0.602
 Standard Error of Estimate: 12.704
 Variance of White Noise Error (sigsq): 38.964
 Variance of sigsq: 19.470
 -2*log(likelihood): 17907.471

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|------------|------------|------------|---------|
| CNST | 101.514286 | 11.801131 | 8.602081 | 0.000 |
| INTER | 0.043125 | 0.038646 | 1.115882 | 0.265 |
| JULY | 0.074412 | 0.765653 | 0.097187 | 0.923 |
| MAY | 5.986498 | 0.926190 | 6.463576 | 0.000 |
| JUNE | 9.033577 | 0.778858 | 11.598485 | 0.000 |
| TEMP | -0.369888 | 0.206452 | -1.791642 | 0.073 |
| HUMID | -0.964494 | 0.275932 | -3.495403 | 0.000 |
| TEMPHUM | 0.007609 | 0.002941 | 2.586840 | 0.010 |
| TLAG | 0.006138 | 0.177872 | 0.034509 | 0.972 |
| TLAG2 | -0.070009 | 0.178017 | -0.393272 | 0.694 |
| TLAG3 | -0.047004 | 0.176410 | -0.266451 | 0.790 |
| TLAG4 | 0.075487 | 0.175509 | 0.430101 | 0.667 |
| TLAG5 | 0.125518 | 0.129470 | 0.969483 | 0.332 |
| HLAG | -0.019834 | 0.223800 | -0.088626 | 0.929 |
| HLAG2 | -0.012970 | 0.223779 | -0.057960 | 0.954 |
| HLAG3 | 0.309958 | 0.160091 | 1.936141 | 0.053 |
| HOUR1 | -12.936508 | 2.193754 | -5.896972 | 0.000 |
| HOUR2 | -13.214491 | 2.119005 | -6.236177 | 0.000 |
| HOUR3 | -13.057559 | 2.080594 | -6.275881 | 0.000 |
| HOUR4 | -11.031139 | 2.067232 | -5.336189 | 0.000 |
| HOUR5 | -11.266594 | 2.046645 | -5.504910 | 0.000 |
| HOUR6 | -11.077949 | 2.022888 | -5.476304 | 0.000 |
| HOUR7 | -2.526394 | 1.982354 | -1.274441 | 0.203 |
| HOUR8 | 0.119923 | 1.908879 | 0.062824 | 0.950 |
| HOUR9 | 0.761540 | 1.826163 | 0.417016 | 0.677 |
| HOUR10 | 0.518251 | 1.735057 | 0.298694 | 0.765 |
| HOUR12 | -0.289749 | 1.712825 | -0.169165 | 0.866 |
| HOUR13 | 2.305006 | 1.745070 | 1.320868 | 0.187 |
| HOUR14 | 14.626622 | 1.788426 | 8.178489 | 0.000 |
| HOUR15 | 7.629318 | 1.847590 | 4.129335 | 0.000 |
| HOUR16 | 1.053972 | 1.910839 | 0.551575 | 0.581 |
| HOUR17 | 0.150581 | 1.964483 | 0.076652 | 0.939 |
| HOUR18 | -4.358538 | 2.025034 | -2.152329 | 0.031 |
| HOUR19 | -2.553029 | 2.100133 | -1.215651 | 0.224 |
| HOUR20 | -6.742904 | 2.192446 | -3.075517 | 0.002 |
| HOUR21 | -3.908534 | 2.272354 | -1.720037 | 0.086 |
| HOUR22 | -8.631696 | 2.318162 | -3.723508 | 0.000 |
| HOUR23 | -13.007004 | 2.312058 | -5.625724 | 0.000 |
| HOUR24 | -14.564152 | 2.266925 | -6.424628 | 0.000 |
| WEEKEND | -29.352488 | 0.554296 | -52.954583 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|-----|------------|---------|---------|
|-----|-----|------------|---------|---------|

 1 0.871045 0.009358 93.076571 0.000
 AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 161.391546 | 1.000000 |
| 1 | 140.501884 | 0.870565 |

Total Time for Computation and Printing: 0.09 (seconds)
 Number of Iterations: 8

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2755
 R-squared: 0.924
 Standard Error of Estimate: 17.740
 Variance of White Noise Error (sigsq): 30.717
 Variance of sigsq: 0.685
 -2*log(likelihood): 17251.362

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|------------|------------|-----------|---------|
| CNST | 86.995797 | 22.577824 | 3.853152 | 0.000 |
| INTER | -0.002731 | 0.024925 | -0.109572 | 0.913 |
| JULY | -0.399632 | 3.935213 | -0.101553 | 0.919 |
| MAY | 3.193262 | 5.294882 | 0.603085 | 0.547 |
| JUNE | 5.187457 | 4.578917 | 1.132900 | 0.257 |
| TEMP | -0.253851 | 0.258373 | -0.982498 | 0.326 |
| HUMID | -0.401028 | 0.335708 | -1.194572 | 0.232 |
| TEMPHUM | 0.004149 | 0.004258 | 0.974381 | 0.330 |
| TLAG | 0.026681 | 0.056367 | 0.473347 | 0.636 |
| TLAG2 | -0.040809 | 0.056487 | -0.722451 | 0.470 |
| TLAG3 | -0.015859 | 0.056308 | -0.281652 | 0.778 |
| TLAG4 | 0.050893 | 0.055571 | 0.915835 | 0.360 |
| TLAG5 | -0.067069 | 0.055525 | -1.207913 | 0.227 |
| HLAG | 0.013201 | 0.068803 | 0.191861 | 0.848 |
| HLAG2 | -0.042206 | 0.068856 | -0.612961 | 0.540 |
| HLAG3 | 0.151925 | 0.069072 | 2.199512 | 0.028 |
| HOUR1 | -11.542387 | 1.684230 | -6.853212 | 0.000 |
| HOUR2 | -12.364644 | 1.637789 | -7.549594 | 0.000 |
| HOUR3 | -12.608224 | 1.619504 | -7.785239 | 0.000 |
| HOUR4 | -10.846440 | 1.615798 | -6.712746 | 0.000 |
| HOUR5 | -11.337517 | 1.606417 | -7.057644 | 0.000 |
| HOUR6 | -11.304630 | 1.586434 | -7.125813 | 0.000 |
| HOUR7 | -2.971502 | 1.489689 | -1.994713 | 0.046 |
| HOUR8 | -0.263935 | 1.287397 | -0.205014 | 0.838 |
| HOUR9 | 0.577360 | 1.000785 | 0.576907 | 0.564 |
| HOUR10 | 0.509248 | 0.635984 | 0.800725 | 0.423 |
| HOUR12 | 0.421428 | 0.645925 | 0.652442 | 0.514 |
| HOUR13 | 3.776974 | 1.033254 | 3.655417 | 0.000 |
| HOUR14 | 16.713639 | 1.354429 | 12.339990 | 0.000 |
| HOUR15 | 10.232932 | 1.612541 | 6.345842 | 0.000 |

| HOUR16 | 4.057549 | 1.803897 | 2.249324 | 0.025 |
|---------|------------|----------|-----------|-------|
| HOUR17 | 3.462177 | 1.934769 | 1.789453 | 0.074 |
| HOUR18 | -1.101038 | 2.011675 | -0.547324 | 0.584 |
| HOUR19 | 0.432316 | 2.042101 | 0.211701 | 0.832 |
| HOUR20 | -4.072617 | 2.032360 | -2.003886 | 0.045 |
| HOUR21 | -1.397477 | 1.999454 | -0.698929 | 0.485 |
| HOUR22 | -6.169957 | 1.944223 | -3.173481 | 0.002 |
| HOUR23 | -10.563303 | 1.858100 | -5.685001 | 0.000 |
| HOUR24 | -12.443067 | 1.761482 | -7.063976 | 0.000 |
| WEEKEND | -1.850694 | 0.984406 | -1.880011 | 0.060 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.949944 | 0.005952 | 159.595295 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 314.699686 | 1.000000 |
| 1 | 298.947107 | 0.949944 |

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

DEPENDENT VARIABLE:

KWH

Number of Observations: 2755

R-squared: 0.859

Standard Error of Estimate: 379.555

Variance of White Noise Error (sigsq): 33301.767

Variance of sigsq:15513459.926

-2*log(likelihood): 36505.711

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|------------|---------|
| CNST | 4540.107944 | 349.088437 | 13.005610 | 0.000 |
| INTER | -4.482142 | 1.657958 | -2.703411 | 0.007 |
| JULY | -401.098828 | 22.875008 | -17.534369 | 0.000 |
| MAY | -582.683878 | 27.671440 | -21.057230 | 0.000 |
| JUNE | -399.170619 | 23.268242 | -17.155169 | 0.000 |
| TEMP | -37.370071 | 6.125180 | -6.101057 | 0.000 |
| HUMID | -61.121884 | 8.164747 | -7.486072 | 0.000 |
| TEMPHUM | 0.822097 | 0.086656 | 9.486882 | 0.000 |
| TLAG | 10.190707 | 5.315867 | 1.917036 | 0.055 |
| TLAG2 | 5.120562 | 5.320347 | 0.962449 | 0.336 |

| | | | | |
|---------|--------------|-----------|------------|-------|
| TLAG3 | 4.685086 | 5.273006 | 0.888504 | 0.374 |
| TLAG4 | 3.000235 | 5.243586 | 0.572172 | 0.567 |
| TLAG5 | 9.520867 | 3.868041 | 2.461418 | 0.014 |
| HLAG | 11.729226 | 6.686620 | 1.754134 | 0.080 |
| HLAG2 | 7.671810 | 6.685955 | 1.147452 | 0.251 |
| HLAG3 | 11.401220 | 4.782970 | 2.383711 | 0.017 |
| HOUR1 | -1449.058403 | 65.525026 | -22.114580 | 0.000 |
| HOUR2 | -1419.590331 | 63.289726 | -22.430028 | 0.000 |
| HOUR3 | -1361.504498 | 62.140368 | -21.910146 | 0.000 |
| HOUR4 | -649.595510 | 61.737529 | -10.521890 | 0.000 |
| HOUR5 | -532.103365 | 61.119997 | -8.705880 | 0.000 |
| HOUR6 | -551.832144 | 60.409401 | -9.134872 | 0.000 |
| HOUR7 | -538.435234 | 59.198997 | -9.095344 | 0.000 |
| HOUR8 | -329.143413 | 57.018466 | -5.772576 | 0.000 |
| HOUR9 | -107.601120 | 54.553424 | -1.972399 | 0.049 |
| HOUR10 | 6.824158 | 51.836314 | 0.131648 | 0.895 |
| HOUR12 | -13.389370 | 51.162248 | -0.261704 | 0.794 |
| HOUR13 | -78.517160 | 52.127101 | -1.506264 | 0.132 |
| HOUR14 | -134.773641 | 53.422961 | -2.522766 | 0.012 |
| HOUR15 | -211.880505 | 55.188814 | -3.839193 | 0.000 |
| HOUR16 | -357.661649 | 57.085694 | -6.265346 | 0.000 |
| HOUR17 | -591.546169 | 58.677820 | -10.081257 | 0.000 |
| HOUR18 | -723.285071 | 60.486114 | -11.957870 | 0.000 |
| HOUR19 | -785.568873 | 62.744857 | -12.520052 | 0.000 |
| HOUR20 | -841.174478 | 65.501875 | -12.841991 | 0.000 |
| HOUR21 | -733.361260 | 67.887203 | -10.802644 | 0.000 |
| HOUR22 | -1023.615319 | 69.253199 | -14.780766 | 0.000 |
| HOUR23 | -1379.838876 | 69.068608 | -19.977800 | 0.000 |
| HOUR24 | -1480.760749 | 67.715430 | -21.867405 | 0.000 |
| WEEKEND | -795.397770 | 16.557423 | -48.038743 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|-----------|---------|
| 1 | 0.876671 | 0.009166 | 95.646731 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVIARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 144061.644679 | 1.000000 |
| 1 | 126295.625012 | 0.876678 |

Total Time for Computation and Printing: 0.11(seconds)
 Number of Iterations: 10

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2755
 R-squared: 0.974
 Standard Error of Estimate: 524.935
 Variance of White Noise Error (sigsq): 26180.152
 Variance of sigsq: 497568.300
 -2*log(likelihood): 35841.943

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|--------------|------------|------------|---------|
| CNST | 2215.152185 | 661.220724 | 3.350095 | 0.001 |
| INTER | -0.803596 | 0.888125 | -0.904823 | 0.366 |
| JULY | -251.075132 | 116.310859 | -2.158656 | 0.031 |
| MAY | -418.601956 | 157.247060 | -2.662065 | 0.008 |
| JUNE | -358.524860 | 135.888144 | -2.638382 | 0.008 |
| TEMP | -9.315648 | 7.544006 | -1.234841 | 0.217 |
| HUMID | -14.286067 | 9.805215 | -1.456987 | 0.145 |
| TEMPHUM | 0.325735 | 0.124354 | 2.619407 | 0.009 |
| TLAG | 10.959228 | 1.646405 | 6.656458 | 0.000 |
| TLAG2 | 6.488551 | 1.649401 | 3.933883 | 0.000 |
| TLAG3 | 4.771077 | 1.644955 | 2.900430 | 0.004 |
| TLAG4 | 2.406250 | 1.622040 | 1.483471 | 0.138 |
| TLAG5 | 2.776528 | 1.620970 | 1.712880 | 0.087 |
| HLAG | 12.653885 | 2.009324 | 6.297584 | 0.000 |
| HLAG2 | 6.923791 | 2.011093 | 3.442800 | 0.001 |
| HLAG3 | 6.032871 | 2.017088 | 2.990882 | 0.003 |
| HOUR1 | -1371.219931 | 49.177693 | -27.882966 | 0.000 |
| HOUR2 | -1359.202973 | 47.826311 | -28.419566 | 0.000 |
| HOUR3 | -1312.776389 | 47.299470 | -27.754569 | 0.000 |
| HOUR4 | -608.866303 | 47.199636 | -12.899809 | 0.000 |
| HOUR5 | -499.526362 | 46.932399 | -10.643529 | 0.000 |
| HOUR6 | -527.355693 | 46.355716 | -11.376282 | 0.000 |
| HOUR7 | -530.858064 | 43.527485 | -12.195928 | 0.000 |
| HOUR8 | -325.765573 | 37.613409 | -8.660889 | 0.000 |
| HOUR9 | -104.967656 | 29.236655 | -3.590276 | 0.000 |
| HOUR10 | 10.444850 | 18.572074 | 0.562395 | 0.574 |
| HOUR12 | -0.248257 | 18.848840 | -0.013171 | 0.989 |
| HOUR13 | -42.058146 | 30.182293 | -1.393471 | 0.164 |
| HOUR14 | -79.797664 | 39.577203 | -2.016253 | 0.044 |
| HOUR15 | -142.417490 | 47.123596 | -3.022212 | 0.003 |
| HOUR16 | -271.724558 | 52.719986 | -5.154109 | 0.000 |
| HOUR17 | -497.770554 | 56.539446 | -8.803952 | 0.000 |
| HOUR18 | -625.389912 | 58.782482 | -10.639053 | 0.000 |
| HOUR19 | -683.589157 | 59.664928 | -11.457135 | 0.000 |
| HOUR20 | -739.286630 | 59.370860 | -12.452012 | 0.000 |
| HOUR21 | -630.779593 | 58.398397 | -10.801317 | 0.000 |
| HOUR22 | -919.035195 | 56.774593 | -16.187438 | 0.000 |
| HOUR23 | -1273.155470 | 54.251835 | -23.467510 | 0.000 |
| HOUR24 | -1384.142772 | 51.429674 | -26.913310 | 0.000 |
| WEEKEND | -3.796065 | 28.752561 | -0.132025 | 0.895 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.951310 | 0.005872 | 161.995236 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 275556.371559 | 1.000000 |
| 1 | 262139.669540 | 0.951310 |

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2227
 R-squared: 0.048
 Standard Error of Estimate: 392.288
 Variance of White Noise Error (sigsq): 22737.628
 Variance of sigsq:22053281.330
 -2*log(likelihood): 28658.807

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|-----------|---------|
| CNST | 4843.884815 | 389.479462 | 12.436817 | 0.000 |
| INTER | 0.922654 | 1.734315 | 0.531999 | 0.595 |
| JULY | -4.401193 | 37.167547 | -0.118415 | 0.906 |
| MAY | 51.498324 | 41.798174 | 1.232071 | 0.218 |
| JUNE | -39.192734 | 37.925343 | -1.033418 | 0.302 |
| TEMP | 8.014663 | 7.074840 | 1.132840 | 0.257 |
| HUMID | -2.356306 | 9.474869 | -0.248690 | 0.804 |
| TEMPHUM | -0.102937 | 0.103256 | -0.996903 | 0.319 |
| TLAG | 2.089647 | 6.016041 | 0.347346 | 0.728 |
| TLAG2 | -0.070694 | 6.021199 | -0.011741 | 0.991 |
| TLAG3 | -3.607197 | 5.980403 | -0.603170 | 0.546 |
| TLAG4 | 3.793325 | 5.952808 | 0.637233 | 0.524 |
| TLAG5 | 5.696083 | 4.389433 | 1.297681 | 0.195 |
| HLAG | 1.205064 | 7.588537 | 0.158801 | 0.874 |
| HLAG2 | 2.124202 | 7.587271 | 0.279969 | 0.780 |
| HLAG3 | -2.995642 | 5.515150 | -0.543166 | 0.587 |
| HOUR1 | -48.487647 | 75.387729 | -0.643177 | 0.520 |
| HOUR2 | -29.355100 | 72.582460 | -0.404438 | 0.686 |
| HOUR3 | -16.870217 | 71.161868 | -0.237068 | 0.813 |
| HOUR4 | -39.123167 | 70.664525 | -0.553646 | 0.580 |
| HOUR5 | -8.297696 | 70.057134 | -0.118442 | 0.906 |
| HOUR6 | -37.585830 | 69.187229 | -0.543248 | 0.587 |
| HOUR7 | -82.862664 | 67.945153 | -1.219552 | 0.223 |
| HOUR8 | -70.766722 | 65.433735 | -1.081502 | 0.280 |
| HOUR9 | -59.465711 | 62.792674 | -0.947017 | 0.344 |
| HOUR10 | -41.599289 | 59.723620 | -0.696530 | 0.486 |
| HOUR12 | -56.751825 | 58.864157 | -0.964115 | 0.335 |
| HOUR13 | -41.884364 | 59.914579 | -0.699068 | 0.485 |
| HOUR14 | -32.759143 | 61.256891 | -0.534783 | 0.593 |
| HOUR15 | -41.498451 | 63.208827 | -0.656529 | 0.512 |
| HOUR16 | -87.297604 | 65.349586 | -1.335855 | 0.182 |
| HOUR17 | -104.456359 | 67.053439 | -1.557808 | 0.119 |
| HOUR18 | -174.294171 | 68.989237 | -2.526397 | 0.012 |

| | | | | |
|---------|-------------|-----------|-----------|-------|
| HOUR19 | -135.545153 | 71.321033 | -1.900493 | 0.057 |
| HOUR20 | -108.756350 | 74.123704 | -1.467228 | 0.142 |
| HOUR21 | -87.237673 | 76.827758 | -1.135497 | 0.256 |
| HOUR22 | -76.355443 | 78.645130 | -0.970886 | 0.332 |
| HOUR23 | -58.137202 | 78.835702 | -0.737448 | 0.461 |
| HOUR24 | -74.343219 | 77.681706 | -0.957024 | 0.339 |
| WEEKEND | 11.717287 | 18.994054 | 0.616892 | 0.537 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.923087 | 0.008150 | 113.266656 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 153889.959571 | 1.000000 |
| 1 | 142016.406536 | 0.922844 |

Total Time for Computation and Printing: 0.08(seconds)

Number of Iterations: 6

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2227
 R-squared: 0.862
 Standard Error of Estimate: 397.643
 Variance of White Noise Error (sigsq): 22388.849
 Variance of sigsq:450166.634
 -2*log(likelihood): 28624.338

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|-----------|---------|
| CNST | 4579.751035 | 630.064287 | 7.268704 | 0.000 |
| INTER | 0.627199 | 0.835442 | 0.750739 | 0.453 |
| JULY | 17.634862 | 111.396149 | 0.158308 | 0.874 |
| MAY | 64.874384 | 140.207562 | 0.462702 | 0.644 |
| JUNE | -22.268631 | 126.110721 | -0.176580 | 0.860 |
| TEMP | 9.139603 | 7.639660 | 1.196336 | 0.232 |
| HUMID | 9.837128 | 9.849928 | 0.998701 | 0.318 |
| TEMPHUM | -0.146500 | 0.127313 | -1.150711 | 0.250 |
| TLAG | 1.705851 | 1.667391 | 1.023066 | 0.306 |
| TLAG2 | -0.410574 | 1.672747 | -0.245449 | 0.806 |
| TLAG3 | -3.084758 | 1.665947 | -1.851654 | 0.064 |
| TLAG4 | 3.499839 | 1.646975 | 2.125010 | 0.034 |
| TLAG5 | 0.111014 | 1.646797 | 0.067412 | 0.946 |
| HLAG | 0.545226 | 2.046092 | 0.266472 | 0.790 |
| HLAG2 | 0.794293 | 2.048539 | 0.387737 | 0.698 |
| HLAG3 | -0.190435 | 2.063506 | -0.092287 | 0.926 |
| HOUR1 | 4.206398 | 50.299524 | 0.083627 | 0.933 |
| HOUR2 | 7.367373 | 48.703558 | 0.151270 | 0.880 |
| HOUR3 | 7.408061 | 48.032708 | 0.154230 | 0.877 |

| | | | | |
|---------|------------|-----------|-----------|-------|
| HOUR4 | -23.179577 | 47.839499 | -0.484528 | 0.628 |
| HOUR5 | 0.302098 | 47.450004 | 0.006367 | 0.995 |
| HOUR6 | -41.980961 | 46.674896 | -0.899433 | 0.369 |
| HOUR7 | -96.248725 | 43.607516 | -2.207159 | 0.027 |
| HOUR8 | -82.928443 | 37.592681 | -2.205973 | 0.027 |
| HOUR9 | -63.764420 | 29.324741 | -2.174424 | 0.030 |
| HOUR10 | -44.849053 | 18.850410 | -2.379208 | 0.017 |
| HOUR12 | -28.662640 | 19.081177 | -1.502142 | 0.133 |
| HOUR13 | 10.472232 | 30.025320 | 0.348780 | 0.727 |
| HOUR14 | 39.695036 | 38.984915 | 1.018215 | 0.309 |
| HOUR15 | 54.220000 | 46.208093 | 1.173388 | 0.241 |
| HOUR16 | 22.454637 | 51.580195 | 0.435334 | 0.663 |
| HOUR17 | 14.062897 | 55.308795 | 0.254261 | 0.799 |
| HOUR18 | -53.546691 | 57.575378 | -0.930028 | 0.352 |
| HOUR19 | -18.212359 | 58.567632 | -0.310963 | 0.756 |
| HOUR20 | 0.293183 | 58.473805 | 0.005014 | 0.996 |
| HOUR21 | 12.574095 | 57.882174 | 0.217236 | 0.828 |
| HOUR22 | 13.938356 | 56.891729 | 0.244998 | 0.806 |
| HOUR23 | 24.196524 | 54.977135 | 0.440120 | 0.660 |
| HOUR24 | -4.231396 | 52.530638 | -0.080551 | 0.936 |
| WEEKEND | 8.982573 | 29.111566 | 0.308557 | 0.758 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.926502 | 0.007974 | 116.193894 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 158119.570318 | 1.000000 |
| 1 | 146498.066121 | 0.926502 |

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2755
 R-squared: 0.786
 Standard Error of Estimate: 89.076
 Variance of White Noise Error (sigsq): 1963.259
 Variance of sigsq: 47060.519
 -2*log(likelihood): 28706.352

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|-----|------|------------|---------|---------|
|-----|------|------------|---------|---------|

| | | | | |
|---------|-------------|-----------|------------|-------|
| CNST | 618.530379 | 81.926136 | 7.549854 | 0.000 |
| INTER | 0.387270 | 0.389099 | 0.995299 | 0.320 |
| JULY | -54.060944 | 5.368442 | -10.070137 | 0.000 |
| MAY | -85.503529 | 6.494097 | -13.166346 | 0.000 |
| JUNE | -45.119991 | 5.460728 | -8.262632 | 0.000 |
| TEMP | 1.529291 | 1.437493 | 1.063859 | 0.287 |
| HUMID | -3.429836 | 1.916151 | -1.789961 | 0.074 |
| TEMPHUM | 0.014887 | 0.020337 | 0.732036 | 0.464 |
| TLAG | 0.937432 | 1.247559 | 0.751413 | 0.452 |
| TLAG2 | 0.294573 | 1.248610 | 0.235920 | 0.814 |
| TLAG3 | -0.307488 | 1.237500 | -0.248475 | 0.804 |
| TLAG4 | 0.913078 | 1.230596 | 0.741980 | 0.458 |
| TLAG5 | 2.089179 | 0.907775 | 2.301429 | 0.021 |
| HLAG | 0.981505 | 1.569255 | 0.625459 | 0.532 |
| HLAG2 | 0.766550 | 1.569099 | 0.488528 | 0.625 |
| HLAG3 | 0.824070 | 1.122496 | 0.734141 | 0.463 |
| HOUR1 | -224.653192 | 15.377800 | -14.608929 | 0.000 |
| HOUR2 | -251.309420 | 14.853207 | -16.919540 | 0.000 |
| HOUR3 | -246.026123 | 14.583469 | -16.870206 | 0.000 |
| HOUR4 | -208.653760 | 14.488928 | -14.400911 | 0.000 |
| HOUR5 | -179.454129 | 14.344002 | -12.510744 | 0.000 |
| HOUR6 | -134.059182 | 14.177235 | -9.455947 | 0.000 |
| HOUR7 | -61.361734 | 13.893170 | -4.416683 | 0.000 |
| HOUR8 | -25.386313 | 13.381430 | -1.897130 | 0.058 |
| HOUR9 | -2.756075 | 12.802920 | -0.215269 | 0.830 |
| HOUR10 | 10.318853 | 12.165252 | 0.848223 | 0.396 |
| HOUR12 | -4.331723 | 12.007059 | -0.360765 | 0.718 |
| HOUR13 | -4.021803 | 12.233496 | -0.328753 | 0.742 |
| HOUR14 | -29.616330 | 12.537616 | -2.362198 | 0.018 |
| HOUR15 | -53.222969 | 12.952037 | -4.109235 | 0.000 |
| HOUR16 | -80.802585 | 13.397208 | -6.031300 | 0.000 |
| HOUR17 | -109.149266 | 13.770857 | -7.926105 | 0.000 |
| HOUR18 | -126.666182 | 14.195239 | -8.923146 | 0.000 |
| HOUR19 | -151.454608 | 14.725334 | -10.285309 | 0.000 |
| HOUR20 | -154.269234 | 15.372367 | -10.035490 | 0.000 |
| HOUR21 | -180.382351 | 15.932170 | -11.321895 | 0.000 |
| HOUR22 | -201.760757 | 16.252750 | -12.413946 | 0.000 |
| HOUR23 | -209.425592 | 16.209429 | -12.919986 | 0.000 |
| HOUR24 | -215.227925 | 15.891857 | -13.543283 | 0.000 |
| WEEKEND | -262.076590 | 3.885794 | -67.444802 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|-----------|---------|
| 1 | 0.868563 | 0.009442 | 91.991949 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 7934.551597 | 1.000000 |
| 1 | 6872.413350 | 0.866138 |

Total Time for Computation and Printing: 0.09(seconds)
 Number of Iterations: 8

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2755
 R-squared: 0.962
 Standard Error of Estimate: 136.371
 Variance of White Noise Error (sig_{sq}): 1394.500
 Variance of sig_{sq}: 1411.711
 -2*log(likelihood): 27762.764

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|------------|---------|
| CNST | 549.186191 | 155.889748 | 3.522914 | 0.000 |
| INTER | 0.148154 | 0.204011 | 0.726209 | 0.468 |
| JULY | -41.939119 | 29.507726 | -1.421293 | 0.155 |
| MAY | -56.616879 | 41.751535 | -1.356043 | 0.175 |
| JUNE | -57.238208 | 35.769077 | -1.600215 | 0.110 |
| TEMP | 0.914284 | 1.743993 | 0.524247 | 0.600 |
| HUMID | -0.137786 | 2.266908 | -0.060782 | 0.952 |
| TEMPHUM | 0.009132 | 0.028727 | 0.317901 | 0.751 |
| TLAG | 1.078779 | 0.379812 | 2.840299 | 0.005 |
| TLAG2 | 0.563198 | 0.380213 | 1.481268 | 0.139 |
| TLAG3 | 0.096775 | 0.379347 | 0.255110 | 0.799 |
| TLAG4 | 0.692689 | 0.373915 | 1.852531 | 0.064 |
| TLAG5 | 0.029962 | 0.373578 | 0.080203 | 0.936 |
| HLAG | 1.172696 | 0.465067 | 2.521567 | 0.012 |
| HLAG2 | 0.486400 | 0.465364 | 1.045204 | 0.296 |
| HLAG3 | 0.437069 | 0.466416 | 0.937078 | 0.349 |
| HOUR1 | -209.792533 | 11.335011 | -18.508365 | 0.000 |
| HOUR2 | -241.993623 | 11.033268 | -21.933087 | 0.000 |
| HOUR3 | -240.917879 | 10.924059 | -22.053880 | 0.000 |
| HOUR4 | -206.313469 | 10.913975 | -18.903605 | 0.000 |
| HOUR5 | -179.754316 | 10.865706 | -16.543271 | 0.000 |
| HOUR6 | -137.051298 | 10.745640 | -12.754131 | 0.000 |
| HOUR7 | -65.686690 | 10.093766 | -6.507649 | 0.000 |
| HOUR8 | -28.605585 | 8.722214 | -3.279624 | 0.001 |
| HOUR9 | -3.691675 | 6.774288 | -0.544954 | 0.586 |
| HOUR10 | 10.261360 | 4.291683 | 2.390987 | 0.017 |
| HOUR12 | 3.180456 | 4.358642 | 0.729690 | 0.466 |
| HOUR13 | 11.763108 | 7.001450 | 1.680096 | 0.093 |
| HOUR14 | -6.899505 | 9.193579 | -0.750470 | 0.453 |
| HOUR15 | -23.619793 | 10.950752 | -2.156911 | 0.031 |
| HOUR16 | -46.247945 | 12.251421 | -3.774905 | 0.000 |
| HOUR17 | -71.486330 | 13.135827 | -5.442088 | 0.000 |
| HOUR18 | -89.032890 | 13.649125 | -6.522974 | 0.000 |
| HOUR19 | -115.800986 | 13.842244 | -8.365767 | 0.000 |
| HOUR20 | -122.172687 | 13.755207 | -8.881923 | 0.000 |
| HOUR21 | -150.556678 | 13.507102 | -11.146483 | 0.000 |
| HOUR22 | -173.333424 | 13.109608 | -13.221862 | 0.000 |
| HOUR23 | -182.270833 | 12.510292 | -14.569671 | 0.000 |
| HOUR24 | -191.917544 | 11.851875 | -16.193011 | 0.000 |
| WEEKEND | -34.360665 | 6.652797 | -5.164845 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.961777 | 0.005217 | 184.351769 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 18597.004855 | 1.000000 |
| 1 | 17886.169451 | 0.961777 |

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2755
 R-squared: 0.585
 Standard Error of Estimate: 196.069
 Variance of White Noise Error (sigsq): 724.902
 Variance of sigsq:1104714.962
 -2*log(likelihood): 25958.901

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|-----------|---------|
| CNST | 1747.152756 | 180.331193 | 9.688578 | 0.000 |
| INTER | 1.101515 | 0.856464 | 1.286121 | 0.199 |
| JULY | 31.725188 | 11.816712 | 2.684773 | 0.007 |
| MAY | 605.238910 | 14.294440 | 42.340861 | 0.000 |
| JUNE | 310.943562 | 12.019848 | 25.869176 | 0.000 |
| TEMP | 4.229837 | 3.164130 | 1.336809 | 0.181 |
| HUMID | -4.146463 | 4.217724 | -0.983104 | 0.326 |
| TEMPHUM | -0.015921 | 0.044765 | -0.355658 | 0.722 |
| TLAG | -0.104078 | 2.746057 | -0.037901 | 0.970 |
| TLAG2 | -0.084245 | 2.748371 | -0.030653 | 0.976 |
| TLAG3 | -0.474108 | 2.723916 | -0.174054 | 0.862 |
| TLAG4 | 0.358032 | 2.708718 | 0.132178 | 0.895 |
| TLAG5 | 5.010743 | 1.998143 | 2.507700 | 0.012 |
| HLAG | -0.184865 | 3.454157 | -0.053520 | 0.957 |
| HLAG2 | 0.355827 | 3.453813 | 0.103025 | 0.918 |
| HLAG3 | -1.295397 | 2.470774 | -0.524288 | 0.600 |
| HOUR1 | 18.627184 | 33.848747 | 0.550306 | 0.582 |
| HOUR2 | 33.445367 | 32.694041 | 1.022980 | 0.306 |
| HOUR3 | 47.032068 | 32.100309 | 1.465159 | 0.143 |
| HOUR4 | 55.315483 | 31.892212 | 1.734451 | 0.083 |
| HOUR5 | 62.691214 | 31.573208 | 1.985583 | 0.047 |
| HOUR6 | 58.301724 | 31.206131 | 1.868278 | 0.062 |

| | | | | |
|---------|-------------|-----------|-----------|-------|
| HOUR7 | 57.198099 | 30.580863 | 1.870389 | 0.062 |
| HOUR8 | 30.730289 | 29.454450 | 1.043316 | 0.297 |
| HOUR9 | 18.501763 | 28.181066 | 0.656532 | 0.512 |
| HOUR10 | 9.243815 | 26.777468 | 0.345209 | 0.730 |
| HOUR12 | -27.562508 | 26.429260 | -1.042879 | 0.297 |
| HOUR13 | -54.215785 | 26.927682 | -2.013385 | 0.044 |
| HOUR14 | -75.096330 | 27.597094 | -2.721168 | 0.007 |
| HOUR15 | -84.941907 | 28.509294 | -2.979446 | 0.003 |
| HOUR16 | -116.195631 | 29.489179 | -3.940280 | 0.000 |
| HOUR17 | -127.894604 | 30.311635 | -4.219324 | 0.000 |
| HOUR18 | -124.467547 | 31.245759 | -3.983502 | 0.000 |
| HOUR19 | -100.530123 | 32.412574 | -3.101578 | 0.002 |
| HOUR20 | -98.157735 | 33.836787 | -2.900918 | 0.004 |
| HOUR21 | -62.425238 | 35.068994 | -1.780069 | 0.075 |
| HOUR22 | -39.507335 | 35.774637 | -1.104339 | 0.270 |
| HOUR23 | -26.111766 | 35.679281 | -0.731847 | 0.464 |
| HOUR24 | -8.378927 | 34.980260 | -0.239533 | 0.811 |
| WEEKEND | 4.363005 | 8.553190 | 0.510103 | 0.610 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.990622 | 0.002603 | 380.560577 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVIARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 38443.166488 | 1.000000 |
| 1 | 38061.507114 | 0.990072 |

Total Time for Computation and Printing: 0.08 (seconds)
 Number of Iterations: 7

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2755
 R-squared: 0.996
 Standard Error of Estimate: 290.591
 Variance of White Noise Error (sigsq): 404.508
 Variance of sigsq: 118.786
 -2*log(likelihood): 24350.373

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|-----------|---------|
| CNST | 2404.075766 | 163.791997 | 14.677614 | 0.000 |
| INTER | 0.069532 | 0.108015 | 0.643729 | 0.520 |
| JULY | 3.885944 | 20.228524 | 0.192102 | 0.848 |
| MAY | 2.746455 | 35.188075 | 0.078051 | 0.938 |
| JUNE | -0.270372 | 28.640644 | -0.009440 | 0.992 |
| TEMP | -1.959141 | 0.933761 | -2.098119 | 0.036 |
| HUMID | -1.642592 | 1.214130 | -1.352896 | 0.176 |
| TEMPHUM | 0.021512 | 0.015357 | 1.400772 | 0.161 |

| | | | | |
|---------|-----------|----------|-----------|-------|
| TLAG | -0.333027 | 0.203146 | -1.639350 | 0.101 |
| TLAG2 | -0.328216 | 0.202978 | -1.616999 | 0.106 |
| TLAG3 | -0.156949 | 0.202790 | -0.773948 | 0.439 |
| TLAG4 | 0.009963 | 0.199426 | 0.049957 | 0.960 |
| TLAG5 | -0.062976 | 0.199155 | -0.316216 | 0.752 |
| HLAG | 0.003679 | 0.250251 | 0.014702 | 0.988 |
| HLAG2 | 0.116395 | 0.250373 | 0.464886 | 0.642 |
| HLAG3 | -0.080628 | 0.250438 | -0.321946 | 0.748 |
| HOUR1 | 27.542674 | 6.034759 | 4.564006 | 0.000 |
| HOUR2 | 25.468191 | 5.885061 | 4.327600 | 0.000 |
| HOUR3 | 24.998547 | 5.841557 | 4.279432 | 0.000 |
| HOUR4 | 23.152873 | 5.852179 | 3.956282 | 0.000 |
| HOUR5 | 21.813811 | 5.843077 | 3.733275 | 0.000 |
| HOUR6 | 11.400305 | 5.795286 | 1.967169 | 0.049 |
| HOUR7 | 12.076360 | 5.449634 | 2.215995 | 0.027 |
| HOUR8 | -4.674124 | 4.709999 | -0.992383 | 0.321 |
| HOUR9 | -3.293768 | 3.652573 | -0.901767 | 0.367 |
| HOUR10 | -1.280808 | 2.301099 | -0.556607 | 0.578 |
| HOUR12 | -0.328635 | 2.339258 | -0.140487 | 0.888 |
| HOUR13 | -0.259966 | 3.780192 | -0.068771 | 0.945 |
| HOUR14 | 1.626860 | 4.975968 | 0.326943 | 0.744 |
| HOUR15 | 13.247005 | 5.929727 | 2.233999 | 0.026 |
| HOUR16 | -4.556795 | 6.632896 | -0.686999 | 0.492 |
| HOUR17 | -8.001529 | 7.107051 | -1.125858 | 0.260 |
| HOUR18 | -5.642550 | 7.375305 | -0.765060 | 0.444 |
| HOUR19 | 9.735207 | 7.466733 | 1.303811 | 0.192 |
| HOUR20 | -3.522869 | 7.399785 | -0.476077 | 0.634 |
| HOUR21 | 17.242093 | 7.241766 | 2.380924 | 0.017 |
| HOUR22 | 26.680442 | 7.004890 | 3.808831 | 0.000 |
| HOUR23 | 27.255834 | 6.666543 | 4.088451 | 0.000 |
| HOUR24 | 28.463771 | 6.308538 | 4.511944 | 0.000 |
| WEEKEND | -1.950424 | 3.563626 | -0.547314 | 0.584 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.997602 | 0.001319 | 756.547194 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 84442.967149 | 1.000000 |
| 1 | 84240.470111 | 0.997602 |

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2659
 R-squared: 0.325
 Standard Error of Estimate: 90.890
 Variance of White Noise Error (sigsq): 6524.043
 Variance of sigsq: 52910.602
 -2*log(likelihood): 30900.340

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|------------|---------|
| CNST | 163.531350 | 84.014282 | 1.946471 | 0.052 |
| INTER | 0.117524 | 0.397409 | 0.295725 | 0.767 |
| JULY | -9.216157 | 5.756906 | -1.600887 | 0.110 |
| MAY | 19.451637 | 6.925117 | 2.808853 | 0.005 |
| JUNE | 2.933230 | 5.858134 | 0.500711 | 0.617 |
| TEMP | 2.817832 | 1.482477 | 1.900759 | 0.057 |
| HUMID | 8.458896 | 1.976346 | 4.280067 | 0.000 |
| TEMPHUM | -0.074588 | 0.021005 | -3.550967 | 0.000 |
| TLAG | -2.029784 | 1.291909 | -1.571151 | 0.116 |
| TLAG2 | -3.802319 | 1.293172 | -2.940304 | 0.003 |
| TLAG3 | -1.088290 | 1.283021 | -0.848224 | 0.396 |
| TLAG4 | 0.802239 | 1.276315 | 0.628559 | 0.530 |
| TLAG5 | 2.428344 | 0.940048 | 2.583213 | 0.010 |
| HLAG | -0.543785 | 1.620033 | -0.335663 | 0.737 |
| HLAG2 | -0.034585 | 1.619962 | -0.021349 | 0.983 |
| HLAG3 | 2.132211 | 1.160237 | 1.837737 | 0.066 |
| HOUR1 | -70.289959 | 15.963712 | -4.403109 | 0.000 |
| HOUR2 | -85.394267 | 15.409307 | -5.541733 | 0.000 |
| HOUR3 | -102.231023 | 15.132887 | -6.755553 | 0.000 |
| HOUR4 | -141.924709 | 15.033243 | -9.440725 | 0.000 |
| HOUR5 | -177.074063 | 14.886363 | -11.895052 | 0.000 |
| HOUR6 | -202.101708 | 14.713952 | -13.735379 | 0.000 |
| HOUR7 | -186.111252 | 14.415092 | -12.910861 | 0.000 |
| HOUR8 | -140.557310 | 13.878950 | -10.127374 | 0.000 |
| HOUR9 | -85.702404 | 13.292437 | -6.447456 | 0.000 |
| HOUR10 | -31.510555 | 12.639715 | -2.492980 | 0.013 |
| HOUR12 | 16.543283 | 12.466860 | 1.326981 | 0.185 |
| HOUR13 | 22.554688 | 12.698129 | 1.776221 | 0.076 |
| HOUR14 | 39.034695 | 13.010461 | 3.000254 | 0.003 |
| HOUR15 | 87.717307 | 13.441457 | 6.525878 | 0.000 |
| HOUR16 | 107.545110 | 13.902177 | 7.735847 | 0.000 |
| HOUR17 | 49.705547 | 14.280570 | 3.480642 | 0.001 |
| HOUR18 | 34.990184 | 14.726361 | 2.376024 | 0.018 |
| HOUR19 | 35.343099 | 15.280758 | 2.312915 | 0.021 |
| HOUR20 | 29.421450 | 15.948421 | 1.844788 | 0.065 |
| HOUR21 | 17.103001 | 16.514993 | 1.035605 | 0.300 |
| HOUR22 | 5.040868 | 16.852676 | 0.299114 | 0.765 |
| HOUR23 | -25.735426 | 16.811842 | -1.530792 | 0.126 |
| HOUR24 | -45.266537 | 16.492242 | -2.744717 | 0.006 |
| WEEKEND | -14.118949 | 4.004087 | -3.526134 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|-----|------------|---------|---------|
|-----|-----|------------|---------|---------|

1 0.458402 0.017235 26.596770 0.000
 AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 8261.001187 | 1.000000 |
| 1 | 3787.732281 | 0.458508 |

Total Time for Computation and Printing: 0.06 (seconds)
 Number of Iterations: 4

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2659
 R-squared: 0.469
 Standard Error of Estimate: 90.992
 Variance of White Noise Error (sigsq): 6507.964
 Variance of sigsq: 31856.789
 -2*log(likelihood): 30893.774

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|------------|---------|
| CNST | 196.851126 | 129.230035 | 1.523261 | 0.128 |
| INTER | 0.478993 | 0.454853 | 1.053071 | 0.292 |
| JULY | -8.756277 | 9.279533 | -0.943612 | 0.345 |
| MAY | 18.648266 | 11.200041 | 1.665018 | 0.096 |
| JUNE | 3.124219 | 9.457311 | 0.330350 | 0.741 |
| TEMP | 2.942019 | 1.995674 | 1.474198 | 0.141 |
| HUMID | 7.210059 | 2.652799 | 2.717907 | 0.007 |
| TEMPHUM | -0.065987 | 0.031990 | -2.062736 | 0.039 |
| TLAG | -2.218345 | 0.924132 | -2.400464 | 0.016 |
| TLAG2 | -3.587098 | 0.949257 | -3.778848 | 0.000 |
| TLAG3 | -1.088361 | 0.943545 | -1.153481 | 0.249 |
| TLAG4 | 1.224588 | 0.910220 | 1.345375 | 0.179 |
| TLAG5 | 1.393608 | 0.827929 | 1.683245 | 0.092 |
| HLAG | 0.377965 | 1.143240 | 0.330608 | 0.741 |
| HLAG2 | 1.135500 | 1.142316 | 0.994033 | 0.320 |
| HLAG3 | 0.523739 | 1.023768 | 0.511580 | 0.609 |
| HOUR1 | -54.997510 | 18.125267 | -3.034301 | 0.002 |
| HOUR2 | -71.859648 | 17.369808 | -4.137043 | 0.000 |
| HOUR3 | -89.665084 | 16.968945 | -5.284069 | 0.000 |
| HOUR4 | -129.653956 | 16.802795 | -7.716214 | 0.000 |
| HOUR5 | -165.057900 | 16.601087 | -9.942596 | 0.000 |
| HOUR6 | -191.034777 | 16.347984 | -11.685525 | 0.000 |
| HOUR7 | -176.236830 | 15.649054 | -11.261820 | 0.000 |
| HOUR8 | -133.859507 | 14.273714 | -9.378043 | 0.000 |
| HOUR9 | -82.940791 | 12.383996 | -6.697417 | 0.000 |
| HOUR10 | -29.414373 | 9.482458 | -3.101978 | 0.002 |
| HOUR12 | 15.046134 | 9.273140 | 1.622550 | 0.105 |
| HOUR13 | 23.021145 | 11.686467 | 1.969898 | 0.049 |
| HOUR14 | 42.111553 | 13.149889 | 3.202427 | 0.001 |
| HOUR15 | 91.282277 | 14.311106 | 6.378422 | 0.000 |
| HOUR16 | 113.228905 | 15.287800 | 7.406488 | 0.000 |

| | | | | |
|---------|------------|-----------|-----------|-------|
| HOUR17 | 57.034687 | 16.042418 | 3.555243 | 0.000 |
| HOUR18 | 43.431395 | 16.752850 | 2.592478 | 0.010 |
| HOUR19 | 45.786108 | 17.537358 | 2.610776 | 0.009 |
| HOUR20 | 41.227543 | 18.457315 | 2.233670 | 0.026 |
| HOUR21 | 29.767614 | 19.308163 | 1.541711 | 0.123 |
| HOUR22 | 19.533878 | 19.808215 | 0.986150 | 0.324 |
| HOUR23 | -10.406810 | 19.641519 | -0.529837 | 0.596 |
| HOUR24 | -29.617418 | 18.982201 | -1.560273 | 0.119 |
| WEEKEND | -16.085134 | 6.259475 | -2.569726 | 0.010 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|-----------|---------|
| 1 | 0.462567 | 0.017193 | 26.903791 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVIARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 8279.515994 | 1.000000 |
| 1 | 3829.828878 | 0.462567 |

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

DEPENDENT VARIABLE:

KWH

Number of Observations: 2299

R-squared: 0.177

Standard Error of Estimate: 592.214

Variance of White Noise Error (sigsq): 60861.079

Variance of sigsq: 110828647.780

-2*log(likelihood): 31849.118

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|------------|---------|
| CNST | 5219.667302 | 583.287045 | 8.948711 | 0.000 |
| INTER | -6.196897 | 2.610889 | -2.373482 | 0.018 |
| JULY | -228.353152 | 50.741820 | -4.500295 | 0.000 |
| MAY | -622.146512 | 58.298181 | -10.671800 | 0.000 |
| JUNE | 59.188323 | 51.814562 | 1.142311 | 0.253 |
| TEMP | -20.497765 | 10.568648 | -1.939488 | 0.053 |
| HUMID | -51.856889 | 14.150670 | -3.664624 | 0.000 |
| TEMPHUM | 0.354293 | 0.153698 | 2.305117 | 0.021 |
| TLAG | 1.748027 | 9.013411 | 0.193936 | 0.846 |
| TLAG2 | -3.058109 | 9.020570 | -0.339015 | 0.735 |
| TLAG3 | -0.146114 | 8.958902 | -0.016309 | 0.987 |

| | | | | |
|---------|-------------|------------|-----------|-------|
| TLAG4 | 4.037336 | 8.916794 | 0.452779 | 0.651 |
| TLAG5 | 2.927565 | 6.575738 | 0.445207 | 0.656 |
| HLAG | -1.445638 | 11.369552 | -0.127150 | 0.899 |
| HLAG2 | -1.391804 | 11.368387 | -0.122428 | 0.903 |
| HLAG3 | 8.592660 | 8.256628 | 1.040698 | 0.298 |
| HOUR1 | -213.702595 | 112.406476 | -1.901159 | 0.057 |
| HOUR2 | -250.577844 | 108.342957 | -2.312821 | 0.021 |
| HOUR3 | -229.638667 | 106.174801 | -2.162836 | 0.031 |
| HOUR4 | -160.248228 | 105.379923 | -1.520671 | 0.128 |
| HOUR5 | -51.128546 | 104.422950 | -0.489629 | 0.624 |
| HOUR6 | -162.615071 | 103.231089 | -1.575253 | 0.115 |
| HOUR7 | -9.807783 | 101.272094 | -0.096846 | 0.923 |
| HOUR8 | 37.322435 | 97.575778 | 0.382497 | 0.702 |
| HOUR9 | 25.364953 | 93.516778 | 0.271234 | 0.786 |
| HOUR10 | -5.907234 | 88.823048 | -0.066506 | 0.947 |
| HOUR12 | -14.914317 | 87.442216 | -0.170562 | 0.865 |
| HOUR13 | -38.739178 | 89.029904 | -0.435125 | 0.664 |
| HOUR14 | -97.074413 | 91.100010 | -1.065581 | 0.287 |
| HOUR15 | -95.053946 | 94.056776 | -1.010602 | 0.312 |
| HOUR16 | -68.866249 | 97.336410 | -0.707508 | 0.479 |
| HOUR17 | -15.093263 | 99.947736 | -0.151012 | 0.880 |
| HOUR18 | -268.861151 | 102.848229 | -2.614154 | 0.009 |
| HOUR19 | -274.722660 | 106.468513 | -2.580318 | 0.010 |
| HOUR20 | -200.242781 | 110.827793 | -1.806792 | 0.071 |
| HOUR21 | -150.185204 | 114.784938 | -1.308405 | 0.191 |
| HOUR22 | -186.739038 | 117.459987 | -1.589810 | 0.112 |
| HOUR23 | -227.358908 | 117.752209 | -1.930825 | 0.054 |
| HOUR24 | -199.864880 | 115.898681 | -1.724479 | 0.085 |
| WEEKEND | -84.381587 | 27.959579 | -3.017985 | 0.003 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.908776 | 0.008703 | 104.422577 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 350717.764840 | 1.000000 |
| 1 | 318814.090658 | 0.909033 |

Total Time for Computation and Printing: 0.06 (seconds)
 Number of Iterations: 7

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2299
 R-squared: 0.862
 Standard Error of Estimate: 601.267
 Variance of White Noise Error (sig_{sq}): 58978.199
 Variance of sig_{sq}: 3026035.634
 -2*log(likelihood): 31776.805

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|-----------|---------|
| CNST | 3212.679296 | 987.177016 | 3.254411 | 0.001 |
| INTER | -0.493091 | 1.361305 | -0.362219 | 0.717 |
| JULY | -144.654965 | 158.777085 | -0.911057 | 0.362 |
| MAY | -427.806140 | 197.345040 | -2.167808 | 0.030 |
| JUNE | 66.170726 | 175.878329 | 0.376230 | 0.707 |
| TEMP | -1.436154 | 12.242905 | -0.117305 | 0.907 |
| HUMID | -1.368255 | 15.800263 | -0.086597 | 0.931 |
| TEMPHUM | -0.003643 | 0.204118 | -0.017848 | 0.986 |
| TLAG | 2.737140 | 2.686214 | 1.018958 | 0.308 |
| TLAG2 | -3.023423 | 2.697672 | -1.120752 | 0.263 |
| TLAG3 | -2.463005 | 2.686591 | -0.916777 | 0.359 |
| TLAG4 | 3.260544 | 2.655165 | 1.228001 | 0.220 |
| TLAG5 | 2.853555 | 2.655130 | 1.074732 | 0.283 |
| HLAG | -2.045913 | 3.282007 | -0.623372 | 0.533 |
| HLAG2 | -4.596167 | 3.286560 | -1.398473 | 0.162 |
| HLAG3 | 0.005554 | 3.315093 | 0.001675 | 0.999 |
| HOUR1 | -215.946461 | 80.543867 | -2.681104 | 0.007 |
| HOUR2 | -259.039841 | 77.939226 | -3.323613 | 0.001 |
| HOUR3 | -241.627183 | 76.732180 | -3.148968 | 0.002 |
| HOUR4 | -175.027978 | 76.301223 | -2.293908 | 0.022 |
| HOUR5 | -70.305057 | 75.596032 | -0.930010 | 0.352 |
| HOUR6 | -187.411228 | 74.377619 | -2.519726 | 0.012 |
| HOUR7 | -62.379778 | 69.543044 | -0.896995 | 0.370 |
| HOUR8 | -12.398804 | 60.005144 | -0.206629 | 0.836 |
| HOUR9 | -7.410286 | 46.839786 | -0.158205 | 0.874 |
| HOUR10 | -18.267603 | 30.167343 | -0.605542 | 0.545 |
| HOUR12 | 7.120920 | 30.491513 | 0.233538 | 0.815 |
| HOUR13 | -4.058700 | 47.871140 | -0.084784 | 0.932 |
| HOUR14 | -58.000437 | 62.109321 | -0.933844 | 0.350 |
| HOUR15 | -51.889802 | 73.614122 | -0.704889 | 0.481 |
| HOUR16 | -17.312409 | 82.207752 | -0.210593 | 0.833 |
| HOUR17 | 30.550814 | 88.201920 | 0.346374 | 0.729 |
| HOUR18 | -234.798298 | 91.897027 | -2.555015 | 0.011 |
| HOUR19 | -254.679763 | 93.586738 | -2.721323 | 0.007 |
| HOUR20 | -194.637823 | 93.578492 | -2.079942 | 0.038 |
| HOUR21 | -149.017796 | 92.737324 | -1.606880 | 0.108 |
| HOUR22 | -190.666061 | 91.254233 | -2.089394 | 0.037 |
| HOUR23 | -225.690858 | 88.221067 | -2.558242 | 0.011 |
| HOUR24 | -201.947461 | 84.201533 | -2.398382 | 0.017 |
| WEEKEND | -38.252574 | 45.852070 | -0.834261 | 0.404 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.914801 | 0.008424 | 108.596936 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 361521.596505 | 1.000000 |
| 1 | 330720.383505 | 0.914801 |

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2467
 R-squared: 0.172
 Standard Error of Estimate: 461.290
 Variance of White Noise Error (sigsq): 16252.010
 Variance of sigsq: 37927479.875
 -2*log(likelihood): 30918.440

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|-----------|---------|
| CNST | 7000.924323 | 450.113457 | 15.553688 | 0.000 |
| INTER | 0.564818 | 1.422436 | 0.397078 | 0.691 |
| JULY | -234.084780 | 31.983651 | -7.318889 | 0.000 |
| MAY | -305.350471 | 37.856597 | -8.065978 | 0.000 |
| JUNE | -84.425929 | 32.603437 | -2.589479 | 0.010 |
| TEMP | -20.726010 | 8.009837 | -2.587569 | 0.010 |
| HUMID | -47.736852 | 10.753711 | -4.439105 | 0.000 |
| TEMPHUM | 0.450346 | 0.115596 | 3.895866 | 0.000 |
| TLAG | 0.193115 | 6.838406 | 0.028240 | 0.977 |
| TLAG2 | 0.946516 | 6.843435 | 0.138310 | 0.890 |
| TLAG3 | -5.053039 | 6.787480 | -0.744465 | 0.457 |
| TLAG4 | -0.454243 | 6.756303 | -0.067232 | 0.946 |
| TLAG5 | 9.678992 | 4.996587 | 1.937121 | 0.053 |
| HLAG | -2.028366 | 8.652621 | -0.234422 | 0.815 |
| HLAG2 | -0.822744 | 8.652880 | -0.095083 | 0.924 |
| HLAG3 | -7.229655 | 6.268642 | -1.153305 | 0.249 |
| HOUR1 | 23.906307 | 84.884015 | 0.281635 | 0.778 |
| HOUR2 | -123.332788 | 81.913322 | -1.505650 | 0.132 |
| HOUR3 | 39.044518 | 80.265459 | 0.486442 | 0.627 |
| HOUR4 | 39.789932 | 79.714072 | 0.499158 | 0.618 |
| HOUR5 | -86.300870 | 78.978065 | -1.092719 | 0.275 |
| HOUR6 | 6.516533 | 78.020945 | 0.083523 | 0.933 |
| HOUR7 | -204.795746 | 76.506251 | -2.676850 | 0.007 |
| HOUR8 | -158.087553 | 73.622682 | -2.147267 | 0.032 |
| HOUR9 | 35.949697 | 70.330155 | 0.511156 | 0.609 |
| HOUR10 | 97.773232 | 66.715381 | 1.465528 | 0.143 |
| HOUR12 | 78.152985 | 65.742212 | 1.188779 | 0.235 |
| HOUR13 | 34.213491 | 67.039632 | 0.510347 | 0.610 |
| HOUR14 | -126.239358 | 68.699145 | -1.837568 | 0.066 |
| HOUR15 | -17.287141 | 70.998209 | -0.243487 | 0.808 |
| HOUR16 | -19.242057 | 73.491813 | -0.261826 | 0.793 |
| HOUR17 | -147.502026 | 75.566041 | -1.951962 | 0.051 |
| HOUR18 | -74.837855 | 77.779203 | -0.962183 | 0.336 |
| HOUR19 | -287.955999 | 80.549168 | -3.574910 | 0.000 |

| | | | | |
|---------|-------------|-----------|-----------|-------|
| HOUR20 | -273.522267 | 83.896458 | -3.260236 | 0.001 |
| HOUR21 | -110.610440 | 87.031356 | -1.270926 | 0.204 |
| HOUR22 | -58.900943 | 89.036957 | -0.661534 | 0.508 |
| HOUR23 | -166.122938 | 89.162246 | -1.863153 | 0.063 |
| HOUR24 | -12.301218 | 87.621234 | -0.140391 | 0.888 |
| WEEKEND | -72.309451 | 20.917300 | -3.456921 | 0.001 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.960796 | 0.005582 | 172.121733 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 212788.031554 | 1.000000 |
| 1 | 204472.446168 | 0.960921 |

Total Time for Computation and Printing: 0.08(seconds)
 Number of Iterations: 6

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2467
 R-squared: 0.942
 Standard Error of Estimate: 488.183
 Variance of White Noise Error (sigsq): 14904.962
 Variance of sigsq:180103.693
 -2*log(likelihood): 30704.783

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|-----------|---------|
| CNST | 5174.048150 | 546.084972 | 9.474804 | 0.000 |
| INTER | -0.600263 | 0.546838 | -1.097697 | 0.272 |
| JULY | -243.049012 | 107.084668 | -2.269690 | 0.023 |
| MAY | -184.152927 | 158.053940 | -1.165127 | 0.244 |
| JUNE | -242.130931 | 135.132544 | -1.791803 | 0.073 |
| TEMP | -3.964505 | 6.125572 | -0.647206 | 0.518 |
| HUMID | -5.632464 | 7.932489 | -0.710050 | 0.478 |
| TEMPHUM | 0.094043 | 0.101691 | 0.924797 | 0.355 |
| TLAG | -0.262315 | 1.316755 | -0.199213 | 0.842 |
| TLAG2 | -0.002000 | 1.318052 | -0.001517 | 0.999 |
| TLAG3 | -4.106097 | 1.313674 | -3.125658 | 0.002 |
| TLAG4 | -0.763266 | 1.296734 | -0.588606 | 0.556 |
| TLAG5 | -0.202064 | 1.295183 | -0.156012 | 0.876 |
| HLAG | -1.668913 | 1.640922 | -1.017058 | 0.309 |
| HLAG2 | -2.121088 | 1.640992 | -1.292564 | 0.196 |
| HLAG3 | 0.246878 | 1.645357 | 0.150045 | 0.881 |
| HOUR1 | 95.446908 | 39.338923 | 2.426271 | 0.015 |
| HOUR2 | -80.615952 | 38.270907 | -2.106455 | 0.035 |
| HOUR3 | 58.874046 | 37.904600 | 1.553216 | 0.121 |
| HOUR4 | 43.398840 | 37.954798 | 1.143435 | 0.253 |

| | | | | |
|---------|-------------|-----------|-----------|-------|
| HOUR5 | -97.434474 | 37.874009 | -2.572595 | 0.010 |
| HOUR6 | -19.771363 | 37.524645 | -0.526890 | 0.598 |
| HOUR7 | -247.108326 | 35.241816 | -7.011793 | 0.000 |
| HOUR8 | -194.221117 | 30.424484 | -6.383711 | 0.000 |
| HOUR9 | 18.186196 | 23.570321 | 0.771572 | 0.440 |
| HOUR10 | 87.566420 | 14.873970 | 5.887226 | 0.000 |
| HOUR12 | 129.176439 | 15.118066 | 8.544508 | 0.000 |
| HOUR13 | 131.238292 | 24.288258 | 5.403364 | 0.000 |
| HOUR14 | 9.449893 | 31.876632 | 0.296452 | 0.767 |
| HOUR15 | 160.352886 | 37.887930 | 4.232295 | 0.000 |
| HOUR16 | 184.313434 | 42.326859 | 4.354527 | 0.000 |
| HOUR17 | 72.322837 | 45.371149 | 1.594027 | 0.111 |
| HOUR18 | 150.564695 | 47.124145 | 3.195065 | 0.001 |
| HOUR19 | -69.852561 | 47.803557 | -1.461242 | 0.144 |
| HOUR20 | -74.031088 | 47.431127 | -1.560812 | 0.119 |
| HOUR21 | 67.034443 | 46.568825 | 1.439470 | 0.150 |
| HOUR22 | 95.635445 | 45.286902 | 2.111768 | 0.035 |
| HOUR23 | -30.882690 | 43.354620 | -0.712328 | 0.476 |
| HOUR24 | 96.965341 | 41.141414 | 2.356879 | 0.019 |
| WEEKEND | 17.591247 | 23.255551 | 0.756432 | 0.449 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.968225 | 0.005035 | 192.299229 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 238322.275103 | 1.000000 |
| 1 | 230749.479410 | 0.968225 |

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

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DEPENDENT VARIABLE:          KWH
      Number of Observations:    2539
              R-squared:          0.814
Standard Error of Estimate:    81.737
Variance of White Noise Error (sigsq): 2410.969
              Variance of sigsq: 36294.504
              -2*log(likelihood): 26977.533
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COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|-----|------|------------|---------|---------|
|-----|------|------------|---------|---------|

| | | | | |
|---------|-------------|-----------|------------|-------|
| CNST | 1549.866249 | 76.677299 | 20.212844 | 0.000 |
| INTER | 1.021881 | 0.332892 | 3.069711 | 0.002 |
| JULY | -1.130365 | 5.473549 | -0.206514 | 0.836 |
| MAY | -1.331556 | 6.481073 | -0.205453 | 0.837 |
| JUNE | 40.023451 | 5.572192 | 7.182713 | 0.000 |
| TEMP | -6.805134 | 1.358775 | -5.008287 | 0.000 |
| HUMID | -10.750902 | 1.814948 | -5.923532 | 0.000 |
| TEMPHUM | 0.148365 | 0.019368 | 7.660518 | 0.000 |
| TLAG | 1.221572 | 1.180108 | 1.035135 | 0.301 |
| TLAG2 | 0.597889 | 1.180840 | 0.506325 | 0.613 |
| TLAG3 | 0.293255 | 1.171506 | 0.250323 | 0.802 |
| TLAG4 | 0.484775 | 1.167256 | 0.415312 | 0.678 |
| TLAG5 | 2.374721 | 0.857818 | 2.768328 | 0.006 |
| HLAG | 2.593319 | 1.477699 | 1.754971 | 0.079 |
| HLAG2 | 0.468850 | 1.477613 | 0.317302 | 0.751 |
| HLAG3 | 0.897404 | 1.059544 | 0.846972 | 0.397 |
| HOUR1 | -264.069770 | 14.587031 | -18.103051 | 0.000 |
| HOUR2 | -365.970626 | 14.077788 | -25.996317 | 0.000 |
| HOUR3 | -415.647949 | 13.832550 | -30.048541 | 0.000 |
| HOUR4 | -385.109807 | 13.736317 | -28.035885 | 0.000 |
| HOUR5 | -198.208577 | 13.604181 | -14.569681 | 0.000 |
| HOUR6 | -119.653088 | 13.449861 | -8.896232 | 0.000 |
| HOUR7 | -141.247436 | 13.191515 | -10.707447 | 0.000 |
| HOUR8 | -82.820324 | 12.719098 | -6.511494 | 0.000 |
| HOUR9 | -32.460546 | 12.215827 | -2.657253 | 0.008 |
| HOUR10 | -7.832325 | 11.630256 | -0.673444 | 0.501 |
| HOUR12 | -0.230575 | 11.475410 | -0.020093 | 0.984 |
| HOUR13 | 2.523935 | 11.670460 | 0.216267 | 0.829 |
| HOUR14 | -10.026348 | 11.943761 | -0.839463 | 0.401 |
| HOUR15 | -25.551916 | 12.322927 | -2.073526 | 0.038 |
| HOUR16 | -44.394133 | 12.740481 | -3.484494 | 0.001 |
| HOUR17 | -87.767915 | 13.077032 | -6.711608 | 0.000 |
| HOUR18 | -129.057464 | 13.468664 | -9.582054 | 0.000 |
| HOUR19 | -162.384860 | 13.954903 | -11.636402 | 0.000 |
| HOUR20 | -176.006226 | 14.545499 | -12.100391 | 0.000 |
| HOUR21 | -146.854633 | 15.052658 | -9.756060 | 0.000 |
| HOUR22 | -171.174802 | 15.358628 | -11.145188 | 0.000 |
| HOUR23 | -184.040667 | 15.329212 | -12.005879 | 0.000 |
| HOUR24 | -187.613202 | 15.053184 | -12.463357 | 0.000 |
| WEEKEND | -147.971206 | 3.706040 | -39.927045 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|-----------|---------|
| 1 | 0.799582 | 0.011919 | 67.087305 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 6680.982639 | 1.000000 |
| 1 | 5338.203903 | 0.799015 |

Total Time for Computation and Printing: 0.14 (seconds)
 Number of Iterations: 15

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2539
 R-squared: 0.937
 Standard Error of Estimate: 94.900
 Variance of White Noise Error (sigsq): 2265.156
 Variance of sigsq: 4041.694
 -2*log(likelihood): 26818.777

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|------------|---------|
| CNST | 1354.612408 | 163.565203 | 8.281788 | 0.000 |
| INTER | 0.119441 | 0.371479 | 0.321528 | 0.748 |
| JULY | -15.883919 | 19.547903 | -0.812564 | 0.417 |
| MAY | -0.266205 | 23.901435 | -0.011138 | 0.991 |
| JUNE | 38.966739 | 20.620803 | 1.889681 | 0.059 |
| TEMP | -5.131188 | 2.150441 | -2.386110 | 0.017 |
| HUMID | -6.343563 | 2.784728 | -2.277983 | 0.023 |
| TEMPHUM | 0.109160 | 0.035597 | 3.066564 | 0.002 |
| TLAG | 1.377604 | 0.498785 | 2.761919 | 0.006 |
| TLAG2 | 0.891877 | 0.502135 | 1.776170 | 0.076 |
| TLAG3 | 0.583926 | 0.499419 | 1.169211 | 0.242 |
| TLAG4 | 0.447049 | 0.493850 | 0.905232 | 0.365 |
| TLAG5 | 1.264440 | 0.493078 | 2.564382 | 0.010 |
| HLAG | 2.891219 | 0.596658 | 4.845688 | 0.000 |
| HLAG2 | 0.574505 | 0.597759 | 0.961098 | 0.337 |
| HLAG3 | 0.206097 | 0.600464 | 0.343229 | 0.731 |
| HOUR1 | -256.009025 | 14.597340 | -17.538060 | 0.000 |
| HOUR2 | -360.333460 | 14.094459 | -25.565611 | 0.000 |
| HOUR3 | -411.724747 | 13.838329 | -29.752491 | 0.000 |
| HOUR4 | -382.132441 | 13.689131 | -27.915025 | 0.000 |
| HOUR5 | -196.261996 | 13.488872 | -14.549919 | 0.000 |
| HOUR6 | -119.863199 | 13.201747 | -9.079344 | 0.000 |
| HOUR7 | -142.246396 | 12.351314 | -11.516701 | 0.000 |
| HOUR8 | -83.104457 | 10.694812 | -7.770539 | 0.000 |
| HOUR9 | -31.944798 | 8.428908 | -3.789910 | 0.000 |
| HOUR10 | -6.966743 | 5.535388 | -1.258583 | 0.208 |
| HOUR12 | 3.122915 | 5.564034 | 0.561268 | 0.575 |
| HOUR13 | 9.378831 | 8.522763 | 1.100445 | 0.271 |
| HOUR14 | -0.240189 | 10.925025 | -0.021985 | 0.982 |
| HOUR15 | -13.350304 | 12.893104 | -1.035461 | 0.301 |
| HOUR16 | -30.285459 | 14.379844 | -2.106105 | 0.035 |
| HOUR17 | -72.166900 | 15.428862 | -4.677396 | 0.000 |
| HOUR18 | -113.485849 | 16.114453 | -7.042488 | 0.000 |
| HOUR19 | -148.607180 | 16.494045 | -9.009747 | 0.000 |
| HOUR20 | -163.760489 | 16.659209 | -9.830028 | 0.000 |
| HOUR21 | -135.541673 | 16.671099 | -8.130338 | 0.000 |
| HOUR22 | -159.682683 | 16.505481 | -9.674525 | 0.000 |
| HOUR23 | -171.896365 | 15.989561 | -10.750537 | 0.000 |
| HOUR24 | -176.529074 | 15.270815 | -11.559898 | 0.000 |
| WEEKEND | -42.056013 | 8.047597 | -5.225909 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|-----------|---------|
| 1 | 0.865151 | 0.009953 | 86.924596 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 9006.099760 | 1.000000 |
| 1 | 7791.637483 | 0.865151 |

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

DEPENDENT VARIABLE:

KWH

Number of Observations: 2755

R-squared: 0.569

Standard Error of Estimate: 595.325

Variance of White Noise Error (sigsq):167465.876

Variance of sigsq:93891813.777

-2*log(likelihood): 40956.216

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|--------------|------------|------------|---------|
| CNST | 2502.368612 | 553.015362 | 4.524953 | 0.000 |
| INTER | -9.485815 | 1.811011 | -5.237856 | 0.000 |
| JULY | -57.756507 | 35.879448 | -1.609738 | 0.108 |
| MAY | -138.111573 | 43.402378 | -3.182120 | 0.001 |
| JUNE | -155.782485 | 36.498251 | -4.268218 | 0.000 |
| TEMP | -16.772392 | 9.674598 | -1.733653 | 0.083 |
| HUMID | -43.843992 | 12.930512 | -3.390739 | 0.001 |
| TEMPHUM | 0.250733 | 0.137837 | 1.819059 | 0.069 |
| TLAG | 1.409299 | 8.335299 | 0.169076 | 0.866 |
| TLAG2 | -1.195190 | 8.342097 | -0.143272 | 0.886 |
| TLAG3 | 4.297528 | 8.266766 | 0.519856 | 0.603 |
| TLAG4 | -2.907296 | 8.224584 | -0.353489 | 0.724 |
| TLAG5 | 1.696333 | 6.067099 | 0.279595 | 0.780 |
| HLAG | 1.866951 | 10.487524 | 0.178016 | 0.859 |
| HLAG2 | 9.111795 | 10.486562 | 0.868902 | 0.385 |
| HLAG3 | 16.185604 | 7.502038 | 2.157494 | 0.031 |
| HOUR1 | -1371.386957 | 102.801994 | -13.340081 | 0.000 |
| HOUR2 | -1365.692121 | 99.299158 | -13.753310 | 0.000 |
| HOUR3 | -1364.433774 | 97.499148 | -13.994315 | 0.000 |
| HOUR4 | -1362.211161 | 96.873001 | -14.061825 | 0.000 |
| HOUR5 | -1350.003127 | 95.908252 | -14.075985 | 0.000 |
| HOUR6 | -858.367403 | 94.794996 | -9.054986 | 0.000 |
| HOUR7 | -7.316599 | 92.895534 | -0.078762 | 0.937 |

| | | | | |
|---------|--------------|------------|------------|-------|
| HOUR8 | 205.269057 | 89.452408 | 2.294729 | 0.022 |
| HOUR9 | 286.320985 | 85.576241 | 3.345800 | 0.001 |
| HOUR10 | 142.247714 | 81.306885 | 1.749516 | 0.080 |
| HOUR12 | -54.959579 | 80.265082 | -0.684726 | 0.494 |
| HOUR13 | -175.429793 | 81.776084 | -2.145246 | 0.032 |
| HOUR14 | -538.044189 | 83.807817 | -6.419976 | 0.000 |
| HOUR15 | -992.776280 | 86.580325 | -11.466534 | 0.000 |
| HOUR16 | -1322.849562 | 89.544252 | -14.773138 | 0.000 |
| HOUR17 | -1354.759360 | 92.058057 | -14.716358 | 0.000 |
| HOUR18 | -1337.723257 | 94.895534 | -14.096799 | 0.000 |
| HOUR19 | -1340.740749 | 98.414796 | -13.623366 | 0.000 |
| HOUR20 | -1332.575303 | 102.740665 | -12.970281 | 0.000 |
| HOUR21 | -1330.319203 | 106.485271 | -12.492988 | 0.000 |
| HOUR22 | -1340.017583 | 108.631899 | -12.335397 | 0.000 |
| HOUR23 | -1358.319923 | 108.345872 | -12.536887 | 0.000 |
| HOUR24 | -1368.676590 | 106.230877 | -12.883981 | 0.000 |
| WEEKEND | -553.972731 | 25.974962 | -21.327181 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|-----------|---------|
| 1 | 0.726082 | 0.013100 | 55.425044 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 354411.576189 | 1.000000 |
| 1 | 257378.266554 | 0.726213 |

Total Time for Computation and Printing: 0.08(seconds)
 Number of Iterations: 8

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2755
 R-squared: 0.799
 Standard Error of Estimate: 605.916
 Variance of White Noise Error (sigsq):165116.719
 Variance of sigsq:19792036.998
 -2*log(likelihood): 40917.246

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|-------------|-----------|---------|
| CNST | 3480.204163 | 1064.101640 | 3.270556 | 0.001 |
| INTER | -7.725521 | 1.900413 | -4.065181 | 0.000 |
| JULY | -22.618843 | 88.226378 | -0.256373 | 0.798 |
| MAY | -83.247843 | 108.136462 | -0.769841 | 0.441 |
| JUNE | -112.852608 | 90.588553 | -1.245771 | 0.213 |
| TEMP | -34.377281 | 15.171687 | -2.265884 | 0.024 |
| HUMID | -49.175532 | 19.909930 | -2.469900 | 0.014 |
| TEMPHUM | 0.585296 | 0.251085 | 2.331072 | 0.020 |
| TLAG | 2.441930 | 4.219060 | 0.578785 | 0.563 |

| | | | | |
|---------|--------------|------------|------------|-------|
| TLAG2 | -0.828426 | 4.289822 | -0.193114 | 0.847 |
| TLAG3 | 2.736790 | 4.266357 | 0.641482 | 0.521 |
| TLAG4 | -4.174692 | 4.156268 | -1.004433 | 0.315 |
| TLAG5 | 4.194499 | 4.095834 | 1.024089 | 0.306 |
| HLAG | -0.022839 | 5.082802 | -0.004493 | 0.996 |
| HLAG2 | 7.173446 | 5.083325 | 1.411172 | 0.158 |
| HLAG3 | 3.077213 | 5.024339 | 0.612461 | 0.540 |
| HOUR1 | -1369.885727 | 111.863901 | -12.246004 | 0.000 |
| HOUR2 | -1361.628447 | 107.575265 | -12.657449 | 0.000 |
| HOUR3 | -1356.952288 | 105.158815 | -12.903838 | 0.000 |
| HOUR4 | -1351.289981 | 103.897249 | -13.006023 | 0.000 |
| HOUR5 | -1336.108346 | 102.244249 | -13.067809 | 0.000 |
| HOUR6 | -846.485507 | 99.952477 | -8.468880 | 0.000 |
| HOUR7 | -13.729975 | 93.934848 | -0.146165 | 0.884 |
| HOUR8 | 189.390593 | 81.966006 | 2.310599 | 0.021 |
| HOUR9 | 272.420986 | 65.792597 | 4.140602 | 0.000 |
| HOUR10 | 137.354254 | 44.998632 | 3.052410 | 0.002 |
| HOUR12 | -45.767786 | 44.449826 | -1.029651 | 0.303 |
| HOUR13 | -168.114561 | 63.867779 | -2.632228 | 0.009 |
| HOUR14 | -537.370852 | 78.817426 | -6.817919 | 0.000 |
| HOUR15 | -996.456213 | 90.970815 | -10.953581 | 0.000 |
| HOUR16 | -1326.043455 | 100.422200 | -13.204684 | 0.000 |
| HOUR17 | -1363.242656 | 107.345353 | -12.699596 | 0.000 |
| HOUR18 | -1361.900555 | 112.515937 | -12.104068 | 0.000 |
| HOUR19 | -1376.968109 | 116.691882 | -11.800033 | 0.000 |
| HOUR20 | -1377.090614 | 120.519892 | -11.426252 | 0.000 |
| HOUR21 | -1367.667072 | 123.700038 | -11.056319 | 0.000 |
| HOUR22 | -1368.338798 | 124.838149 | -10.960903 | 0.000 |
| HOUR23 | -1372.016088 | 122.343579 | -11.214451 | 0.000 |
| HOUR24 | -1374.160429 | 117.300736 | -11.714849 | 0.000 |
| WEEKEND | -332.987546 | 52.724982 | -6.315555 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|-----------|---------|
| 1 | 0.741792 | 0.012777 | 58.057645 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVIARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 367133.884159 | 1.000000 |
| 1 | 272336.825334 | 0.741792 |

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH

Number of Observations: 2539
 R-squared: 0.831
 Standard Error of Estimate: 57.273
 Variance of White Noise Error (sigsq): 1573.056
 Variance of sigsq: 8748.860
 -2*log(likelihood): 25893.645

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|------------|---------|
| CNST | 270.977703 | 54.175206 | 5.001877 | 0.000 |
| INTER | 0.088694 | 0.175138 | 0.506425 | 0.613 |
| JULY | -12.134011 | 3.835306 | -3.163766 | 0.002 |
| MAY | 17.050687 | 4.541264 | 3.754612 | 0.000 |
| JUNE | 13.434249 | 3.904398 | 3.440799 | 0.001 |
| TEMP | -0.340846 | 0.954942 | -0.356928 | 0.721 |
| HUMID | -3.139335 | 1.282372 | -2.448069 | 0.014 |
| TEMPHUM | 0.044291 | 0.013729 | 3.226050 | 0.001 |
| TLAG | 1.829355 | 0.827045 | 2.211916 | 0.027 |
| TLAG2 | 0.370960 | 0.827766 | 0.448145 | 0.654 |
| TLAG3 | -0.282768 | 0.821508 | -0.344206 | 0.731 |
| TLAG4 | -0.372681 | 0.817898 | -0.455657 | 0.649 |
| TLAG5 | 0.773065 | 0.601111 | 1.286061 | 0.199 |
| HLAG | 1.355509 | 1.035507 | 1.309029 | 0.191 |
| HLAG2 | 0.225287 | 1.035322 | 0.217601 | 0.828 |
| HLAG3 | -1.032043 | 0.742424 | -1.390099 | 0.165 |
| HOUR1 | -233.778070 | 10.223122 | -22.867581 | 0.000 |
| HOUR2 | -229.010789 | 9.866143 | -23.211786 | 0.000 |
| HOUR3 | -230.577573 | 9.694655 | -23.783988 | 0.000 |
| HOUR4 | -216.551918 | 9.628136 | -22.491572 | 0.000 |
| HOUR5 | -173.427561 | 9.535462 | -18.187640 | 0.000 |
| HOUR6 | -28.589196 | 9.427418 | -3.032559 | 0.002 |
| HOUR7 | -38.958623 | 9.244860 | -4.214084 | 0.000 |
| HOUR8 | -30.813462 | 8.912041 | -3.457509 | 0.001 |
| HOUR9 | -23.777437 | 8.560265 | -2.777652 | 0.006 |
| HOUR10 | -11.965897 | 8.149634 | -1.468274 | 0.142 |
| HOUR12 | 9.485459 | 8.043059 | 1.179335 | 0.238 |
| HOUR13 | 13.810704 | 8.179292 | 1.688496 | 0.091 |
| HOUR14 | 19.119776 | 8.370425 | 2.284206 | 0.022 |
| HOUR15 | 18.881655 | 8.636076 | 2.186370 | 0.029 |
| HOUR16 | 14.277142 | 8.926008 | 1.599499 | 0.110 |
| HOUR17 | 7.745318 | 9.164609 | 0.845133 | 0.398 |
| HOUR18 | -0.731827 | 9.439411 | -0.077529 | 0.938 |
| HOUR19 | -8.649878 | 9.778105 | -0.884617 | 0.376 |
| HOUR20 | -17.395638 | 10.191984 | -1.706796 | 0.088 |
| HOUR21 | -12.727457 | 10.547405 | -1.206691 | 0.228 |
| HOUR22 | -96.934435 | 10.761785 | -9.007283 | 0.000 |
| HOUR23 | -225.878121 | 10.741302 | -21.028932 | 0.000 |
| HOUR24 | -231.320594 | 10.548768 | -21.928683 | 0.000 |
| WEEKEND | -57.219908 | 2.597440 | -22.029348 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|-----------|---------|
| 1 | 0.721224 | 0.013747 | 52.463276 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 3280.164567 | 1.000000 |
| 1 | 2366.026817 | 0.721313 |

Total Time for Computation and Printing: 0.08 (seconds)
 Number of Iterations: 8

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2539
 R-squared: 0.920
 Standard Error of Estimate: 58.855
 Variance of White Noise Error (sigsq): 1553.419
 Variance of sigsq: 1900.835
 -2*log(likelihood): 25861.682

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|------------|---------|
| CNST | 265.501235 | 105.338201 | 2.520465 | 0.012 |
| INTER | -0.059449 | 0.184752 | -0.321779 | 0.748 |
| JULY | -9.760480 | 9.444770 | -1.033427 | 0.302 |
| MAY | 23.769602 | 11.375299 | 2.089580 | 0.037 |
| JUNE | 15.552254 | 9.708198 | 1.601971 | 0.109 |
| TEMP | -0.891721 | 1.513120 | -0.589326 | 0.556 |
| HUMID | -3.896300 | 1.983084 | -1.964768 | 0.050 |
| TEMPHUM | 0.053185 | 0.025138 | 2.115669 | 0.034 |
| TLAG | 1.847554 | 0.421204 | 4.386358 | 0.000 |
| TLAG2 | 0.438727 | 0.427964 | 1.025151 | 0.305 |
| TLAG3 | -0.130321 | 0.425971 | -0.305939 | 0.760 |
| TLAG4 | -0.365816 | 0.415770 | -0.879852 | 0.379 |
| TLAG5 | 0.759852 | 0.409285 | 1.856533 | 0.063 |
| HLAG | 1.406839 | 0.505942 | 2.780632 | 0.005 |
| HLAG2 | 0.286966 | 0.505873 | 0.567270 | 0.571 |
| HLAG3 | -0.750398 | 0.500331 | -1.499802 | 0.134 |
| HOUR1 | -233.749863 | 11.156894 | -20.951158 | 0.000 |
| HOUR2 | -228.576097 | 10.720722 | -21.320962 | 0.000 |
| HOUR3 | -229.826015 | 10.488410 | -21.912379 | 0.000 |
| HOUR4 | -215.511537 | 10.357059 | -20.808178 | 0.000 |
| HOUR5 | -172.126782 | 10.189590 | -16.892415 | 0.000 |
| HOUR6 | -27.321823 | 9.960683 | -2.742967 | 0.006 |
| HOUR7 | -37.230619 | 9.353376 | -3.980447 | 0.000 |
| HOUR8 | -28.996790 | 8.171542 | -3.548509 | 0.000 |
| HOUR9 | -22.192090 | 6.591152 | -3.366952 | 0.001 |
| HOUR10 | -11.224284 | 4.527752 | -2.478997 | 0.013 |
| HOUR12 | 9.213910 | 4.477032 | 2.058040 | 0.040 |
| HOUR13 | 13.088150 | 6.414168 | 2.040506 | 0.041 |
| HOUR14 | 18.109007 | 7.896776 | 2.293215 | 0.022 |
| HOUR15 | 17.884790 | 9.104084 | 1.964480 | 0.050 |
| HOUR16 | 13.077870 | 10.043011 | 1.302186 | 0.193 |
| HOUR17 | 6.615844 | 10.726892 | 0.616753 | 0.537 |

| | | | | |
|---------|-------------|-----------|------------|-------|
| HOUR18 | -1.803345 | 11.235725 | -0.160501 | 0.872 |
| HOUR19 | -9.915607 | 11.630730 | -0.852535 | 0.394 |
| HOUR20 | -18.670747 | 11.991675 | -1.556976 | 0.120 |
| HOUR21 | -13.870988 | 12.283560 | -1.129232 | 0.259 |
| HOUR22 | -97.791710 | 12.404664 | -7.883463 | 0.000 |
| HOUR23 | -226.403233 | 12.168169 | -18.606188 | 0.000 |
| HOUR24 | -231.397246 | 11.684750 | -19.803355 | 0.000 |
| WEEKEND | -26.528928 | 5.309291 | -4.996699 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|-----------|---------|
| 1 | 0.742657 | 0.013290 | 55.880098 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 3463.888263 | 1.000000 |
| 1 | 2572.479989 | 0.742657 |

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2227
 R-squared: 0.374
 Standard Error of Estimate: 215.876
 Variance of White Noise Error (sigsq): 6814.203
 Variance of sigsq:2022416.204
 -2*log(likelihood): 25975.237

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|-----------|---------|
| CNST | 1544.340368 | 216.958882 | 7.118125 | 0.000 |
| INTER | 0.182738 | 0.672877 | 0.271577 | 0.786 |
| JULY | -122.928157 | 20.483361 | -6.001367 | 0.000 |
| MAY | -83.302175 | 23.027896 | -3.617446 | 0.000 |
| JUNE | -79.383432 | 20.894444 | -3.799260 | 0.000 |
| TEMP | -0.908860 | 3.922187 | -0.231723 | 0.817 |
| HUMID | -9.874190 | 5.270131 | -1.873614 | 0.061 |
| TEMPHUM | 0.136761 | 0.057651 | 2.372212 | 0.018 |
| TLAG | 3.610434 | 3.309421 | 1.090957 | 0.275 |
| TLAG2 | 0.131277 | 3.312205 | 0.039634 | 0.968 |
| TLAG3 | -1.026187 | 3.289236 | -0.311983 | 0.755 |
| TLAG4 | -0.595532 | 3.275879 | -0.181793 | 0.856 |

| | | | | |
|---------|-------------|-----------|------------|-------|
| TLAG5 | 3.390037 | 2.415606 | 1.403390 | 0.161 |
| HLAG | 0.887945 | 4.175784 | 0.212641 | 0.832 |
| HLAG2 | 0.359900 | 4.175197 | 0.086199 | 0.931 |
| HLAG3 | -1.481966 | 3.035002 | -0.488292 | 0.625 |
| HOUR1 | -29.938077 | 41.499550 | -0.721407 | 0.471 |
| HOUR2 | 22.452069 | 39.957318 | 0.561901 | 0.574 |
| HOUR3 | -0.956991 | 39.176704 | -0.024428 | 0.981 |
| HOUR4 | -7.886315 | 38.905616 | -0.202704 | 0.839 |
| HOUR5 | -12.196426 | 38.573033 | -0.316190 | 0.752 |
| HOUR6 | -18.847130 | 38.094656 | -0.494745 | 0.621 |
| HOUR7 | 1.394128 | 37.411188 | 0.037265 | 0.970 |
| HOUR8 | -16.610695 | 36.018345 | -0.461173 | 0.645 |
| HOUR9 | -5.922213 | 34.560359 | -0.171359 | 0.864 |
| HOUR10 | 14.526277 | 32.867345 | 0.441967 | 0.659 |
| HOUR12 | 41.939781 | 32.402310 | 1.294345 | 0.196 |
| HOUR13 | 26.486839 | 32.978956 | 0.803144 | 0.422 |
| HOUR14 | 22.613214 | 33.717292 | 0.670671 | 0.503 |
| HOUR15 | 12.644405 | 34.792429 | 0.363424 | 0.716 |
| HOUR16 | -16.301675 | 35.964882 | -0.453266 | 0.650 |
| HOUR17 | -43.065781 | 36.910684 | -1.166757 | 0.243 |
| HOUR18 | -39.874876 | 37.975896 | -1.050005 | 0.294 |
| HOUR19 | -79.984324 | 39.248055 | -2.037918 | 0.042 |
| HOUR20 | -24.200218 | 40.790953 | -0.593274 | 0.553 |
| HOUR21 | -16.547937 | 42.280618 | -0.391384 | 0.696 |
| HOUR22 | -38.316659 | 43.282975 | -0.885259 | 0.376 |
| HOUR23 | 5.634874 | 43.389482 | 0.129867 | 0.897 |
| HOUR24 | 16.011150 | 42.758038 | 0.374459 | 0.708 |
| WEEKEND | -234.639500 | 10.455902 | -22.440866 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.923777 | 0.008114 | 113.843283 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 46602.470991 | 1.000000 |
| 1 | 43051.942786 | 0.923812 |

Total Time for Computation and Printing: 0.08 (seconds)
 Number of Iterations: 9

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2227
 R-squared: 0.919
 Standard Error of Estimate: 250.466
 Variance of White Noise Error (sigsq): 6001.551
 Variance of sigsq: 32347.206
 -2*log(likelihood): 25692.000

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|------------|------------|-----------|---------|
| CNST | 863.624755 | 345.197638 | 2.501827 | 0.012 |
| INTER | 0.704631 | 0.350475 | 2.010501 | 0.045 |
| JULY | 11.387151 | 66.242459 | 0.171901 | 0.864 |
| MAY | 24.955180 | 89.804192 | 0.277884 | 0.781 |
| JUNE | -3.211839 | 79.579383 | -0.040360 | 0.968 |
| TEMP | 6.819715 | 3.991539 | 1.708543 | 0.088 |
| HUMID | 6.819428 | 5.143863 | 1.325741 | 0.185 |
| TEMPHUM | -0.060831 | 0.066371 | -0.916529 | 0.359 |
| TLAG | 3.442106 | 0.862603 | 3.990370 | 0.000 |
| TLAG2 | 0.522530 | 0.864127 | 0.604691 | 0.545 |
| TLAG3 | -0.540918 | 0.860813 | -0.628380 | 0.530 |
| TLAG4 | -0.670940 | 0.851577 | -0.787879 | 0.431 |
| TLAG5 | -0.310460 | 0.851002 | -0.364817 | 0.715 |
| HLAG | 1.347567 | 1.069931 | 1.259489 | 0.208 |
| HLAG2 | 0.433943 | 1.070176 | 0.405488 | 0.685 |
| HLAG3 | -1.201819 | 1.074930 | -1.118044 | 0.264 |
| HOUR1 | -25.746510 | 26.047118 | -0.988459 | 0.323 |
| HOUR2 | 15.168074 | 25.281841 | 0.599959 | 0.549 |
| HOUR3 | -17.816855 | 25.006046 | -0.712502 | 0.476 |
| HOUR4 | -32.186720 | 24.977815 | -1.288612 | 0.198 |
| HOUR5 | -41.884671 | 24.847941 | -1.685640 | 0.092 |
| HOUR6 | -54.646366 | 24.518456 | -2.228785 | 0.026 |
| HOUR7 | -31.788716 | 22.923959 | -1.386703 | 0.166 |
| HOUR8 | -39.621558 | 19.758907 | -2.005251 | 0.045 |
| HOUR9 | -19.131860 | 15.373500 | -1.244470 | 0.213 |
| HOUR10 | 8.984354 | 9.807422 | 0.916077 | 0.360 |
| HOUR12 | 55.203879 | 9.960421 | 5.542324 | 0.000 |
| HOUR13 | 55.497849 | 15.803810 | 3.511675 | 0.000 |
| HOUR14 | 64.896331 | 20.603906 | 3.149710 | 0.002 |
| HOUR15 | 65.032887 | 24.455712 | 2.659210 | 0.008 |
| HOUR16 | 42.891604 | 27.301117 | 1.571057 | 0.116 |
| HOUR17 | 20.099993 | 29.263475 | 0.686863 | 0.492 |
| HOUR18 | 24.002598 | 30.418668 | 0.789075 | 0.430 |
| HOUR19 | -19.110420 | 30.876315 | -0.618935 | 0.536 |
| HOUR20 | 27.218384 | 30.713642 | 0.886199 | 0.376 |
| HOUR21 | 23.057599 | 30.259805 | 0.761988 | 0.446 |
| HOUR22 | -7.309535 | 29.604840 | -0.246903 | 0.805 |
| HOUR23 | 29.736401 | 28.504080 | 1.043233 | 0.297 |
| HOUR24 | 30.793650 | 27.188582 | 1.132595 | 0.258 |
| WEEKEND | 8.507966 | 15.272066 | 0.557093 | 0.578 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.950964 | 0.006554 | 145.091536 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 62733.465281 | 1.000000 |
| 1 | 59657.267586 | 0.950964 |

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2755
 R-squared: 0.697
 Standard Error of Estimate: 93.285
 Variance of White Noise Error (sigsq): 3547.774
 Variance of sigsq: 56605.112
 -2*log(likelihood): 30337.029

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|------------|---------|
| CNST | 167.993300 | 86.655110 | 1.938643 | 0.053 |
| INTER | -0.290301 | 0.283778 | -1.022990 | 0.306 |
| JULY | 19.903515 | 5.622154 | 3.540194 | 0.000 |
| MAY | 15.728549 | 6.800965 | 2.312694 | 0.021 |
| JUNE | 15.985420 | 5.719118 | 2.795085 | 0.005 |
| TEMP | 2.832390 | 1.515968 | 1.868371 | 0.062 |
| HUMID | 1.610556 | 2.026155 | 0.794883 | 0.427 |
| TEMPHUM | -0.014887 | 0.021598 | -0.689271 | 0.491 |
| TLAG | 2.470241 | 1.306105 | 1.891303 | 0.059 |
| TLAG2 | 1.010585 | 1.307170 | 0.773109 | 0.440 |
| TLAG3 | -0.767046 | 1.295366 | -0.592146 | 0.554 |
| TLAG4 | 0.265830 | 1.288757 | 0.206268 | 0.837 |
| TLAG5 | -0.178628 | 0.950688 | -0.187893 | 0.851 |
| HLAG | 0.855883 | 1.643350 | 0.520816 | 0.603 |
| HLAG2 | 1.336764 | 1.643199 | 0.813513 | 0.416 |
| HLAG3 | -1.981393 | 1.175537 | -1.685522 | 0.092 |
| HOUR1 | -245.809941 | 16.108627 | -15.259522 | 0.000 |
| HOUR2 | -237.849533 | 15.559748 | -15.286208 | 0.000 |
| HOUR3 | -229.452447 | 15.277694 | -15.018788 | 0.000 |
| HOUR4 | -224.042678 | 15.179579 | -14.759479 | 0.000 |
| HOUR5 | -160.154393 | 15.028407 | -10.656778 | 0.000 |
| HOUR6 | 10.382558 | 14.853965 | 0.698976 | 0.485 |
| HOUR7 | 2.019873 | 14.556327 | 0.138763 | 0.890 |
| HOUR8 | -3.469139 | 14.016805 | -0.247499 | 0.805 |
| HOUR9 | -12.061090 | 13.409426 | -0.899449 | 0.368 |
| HOUR10 | -6.506213 | 12.740436 | -0.510674 | 0.610 |
| HOUR12 | 5.271830 | 12.577190 | 0.419158 | 0.675 |
| HOUR13 | 9.244041 | 12.813958 | 0.721404 | 0.471 |
| HOUR14 | 10.150311 | 13.132322 | 0.772926 | 0.440 |
| HOUR15 | 9.695794 | 13.566762 | 0.714673 | 0.475 |
| HOUR16 | 5.567702 | 14.031196 | 0.396809 | 0.692 |
| HOUR17 | 6.152899 | 14.425098 | 0.426541 | 0.670 |
| HOUR18 | 7.227847 | 14.869719 | 0.486078 | 0.627 |
| HOUR19 | 10.652548 | 15.421172 | 0.690774 | 0.490 |

| | | | | |
|---------|-------------|-----------|------------|-------|
| HOUR20 | 18.385509 | 16.099017 | 1.142027 | 0.254 |
| HOUR21 | 13.669034 | 16.685780 | 0.819203 | 0.413 |
| HOUR22 | -65.747150 | 17.022148 | -3.862447 | 0.000 |
| HOUR23 | -200.935532 | 16.977328 | -11.835521 | 0.000 |
| HOUR24 | -236.742992 | 16.645918 | -14.222285 | 0.000 |
| WEEKEND | -116.955722 | 4.070164 | -28.734892 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|-----------|---------|
| 1 | 0.770557 | 0.012143 | 63.456118 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 8702.055735 | 1.000000 |
| 1 | 6686.603519 | 0.768394 |

Total Time for Computation and Printing: 0.11(seconds)
 Number of Iterations: 9

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2755
 R-squared: 0.879
 Standard Error of Estimate: 97.592
 Variance of White Noise Error (sigsq): 3471.754
 Variance of sigsq: 8749.966
 -2*log(likelihood): 30277.246

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|------------|---------|
| CNST | 17.157670 | 172.311092 | 0.099574 | 0.921 |
| INTER | 0.132400 | 0.275373 | 0.480803 | 0.631 |
| JULY | 22.438181 | 15.825994 | 1.417805 | 0.156 |
| MAY | 28.191405 | 19.468029 | 1.448087 | 0.148 |
| JUNE | 16.310926 | 16.351132 | 0.997541 | 0.319 |
| TEMP | 3.027595 | 2.389328 | 1.267132 | 0.205 |
| HUMID | 2.445373 | 3.124204 | 0.782719 | 0.434 |
| TEMPHUM | -0.038839 | 0.039597 | -0.980874 | 0.327 |
| TLAG | 2.627618 | 0.605582 | 4.338998 | 0.000 |
| TLAG2 | 1.273832 | 0.613179 | 2.077424 | 0.038 |
| TLAG3 | -0.417862 | 0.609922 | -0.685108 | 0.493 |
| TLAG4 | 0.368538 | 0.596995 | 0.617323 | 0.537 |
| TLAG5 | 0.077164 | 0.593032 | 0.130118 | 0.896 |
| HLAG | 0.888031 | 0.725764 | 1.223581 | 0.221 |
| HLAG2 | 1.390202 | 0.726337 | 1.913990 | 0.056 |
| HLAG3 | -0.425996 | 0.725081 | -0.587515 | 0.557 |
| HOUR1 | -261.987151 | 16.883586 | -15.517270 | 0.000 |
| HOUR2 | -252.149197 | 16.262602 | -15.504850 | 0.000 |
| HOUR3 | -242.728838 | 15.913376 | -15.253132 | 0.000 |
| HOUR4 | -236.798497 | 15.724332 | -15.059368 | 0.000 |

| | | | | |
|---------|-------------|-----------|------------|-------|
| HOUR5 | -172.187886 | 15.473335 | -11.128039 | 0.000 |
| HOUR6 | -1.039379 | 15.121370 | -0.068736 | 0.945 |
| HOUR7 | -5.247992 | 14.181414 | -0.370061 | 0.711 |
| HOUR8 | -6.025376 | 12.311397 | -0.489414 | 0.625 |
| HOUR9 | -11.837557 | 9.769394 | -1.211698 | 0.226 |
| HOUR10 | -6.298025 | 6.543290 | -0.962517 | 0.336 |
| HOUR12 | 3.055591 | 6.504336 | 0.469778 | 0.639 |
| HOUR13 | 5.153124 | 9.633470 | 0.534919 | 0.593 |
| HOUR14 | 4.704734 | 12.117808 | 0.388250 | 0.698 |
| HOUR15 | 3.375659 | 14.143256 | 0.238676 | 0.811 |
| HOUR16 | -1.822262 | 15.700175 | -0.116066 | 0.908 |
| HOUR17 | -2.740774 | 16.824809 | -0.162901 | 0.871 |
| HOUR18 | -2.188253 | 17.621502 | -0.124181 | 0.901 |
| HOUR19 | 0.735974 | 18.188771 | 0.040463 | 0.968 |
| HOUR20 | 6.525752 | 18.623405 | 0.350406 | 0.726 |
| HOUR21 | -0.169916 | 18.933254 | -0.008975 | 0.993 |
| HOUR22 | -80.673261 | 18.959268 | -4.255083 | 0.000 |
| HOUR23 | -216.053960 | 18.492729 | -11.683184 | 0.000 |
| HOUR24 | -251.409012 | 17.695536 | -14.207482 | 0.000 |
| WEEKEND | -53.924003 | 8.546708 | -6.309331 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|-----------|---------|
| 1 | 0.797171 | 0.011503 | 69.303046 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 9524.215963 | 1.000000 |
| 1 | 7592.427226 | 0.797171 |

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----- INITIAL ESTIMATES -----

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2227
 R-squared: 0.729
 Standard Error of Estimate: 134.131
 Variance of White Noise Error (sigsq): 3874.652
 Variance of sigsq:301421.548
 -2*log(likelihood): 24718.363

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|-----|------|------------|---------|---------|
|-----|------|------------|---------|---------|

| | | | | |
|---------|-------------|------------|------------|-------|
| CNST | 909.382673 | 133.497125 | 6.812002 | 0.000 |
| INTER | 0.649208 | 0.551893 | 1.176328 | 0.240 |
| JULY | -52.678035 | 12.709514 | -4.144772 | 0.000 |
| MAY | -51.739258 | 14.292618 | -3.619999 | 0.000 |
| JUNE | -22.355614 | 12.968004 | -1.723906 | 0.085 |
| TEMP | -3.296651 | 2.429526 | -1.356911 | 0.175 |
| HUMID | -5.802388 | 3.245798 | -1.787661 | 0.074 |
| TEMPHUM | 0.042571 | 0.035407 | 1.202309 | 0.229 |
| TLAG | -0.439342 | 2.055849 | -0.213703 | 0.831 |
| TLAG2 | -0.216825 | 2.057063 | -0.105405 | 0.916 |
| TLAG3 | 0.015126 | 2.041904 | 0.007408 | 0.994 |
| TLAG4 | 0.001881 | 2.035398 | 0.000924 | 0.999 |
| TLAG5 | 2.024407 | 1.500756 | 1.348925 | 0.178 |
| HLAG | -0.621124 | 2.594262 | -0.239422 | 0.811 |
| HLAG2 | 1.183606 | 2.594286 | 0.456236 | 0.648 |
| HLAG3 | 1.122790 | 1.885747 | 0.595408 | 0.552 |
| HOUR1 | -144.454742 | 25.779162 | -5.603547 | 0.000 |
| HOUR2 | -185.183381 | 24.821042 | -7.460742 | 0.000 |
| HOUR3 | -210.862990 | 24.335426 | -8.664857 | 0.000 |
| HOUR4 | -220.843676 | 24.164237 | -9.139278 | 0.000 |
| HOUR5 | -142.917938 | 23.958350 | -5.965266 | 0.000 |
| HOUR6 | -73.933048 | 23.661191 | -3.124655 | 0.002 |
| HOUR7 | -4.387058 | 23.240328 | -0.188769 | 0.850 |
| HOUR8 | 12.865798 | 22.379902 | 0.574882 | 0.565 |
| HOUR9 | 0.356058 | 21.471399 | 0.016583 | 0.987 |
| HOUR10 | 18.001959 | 20.420437 | 0.881566 | 0.378 |
| HOUR12 | 14.224645 | 20.125783 | 0.706787 | 0.480 |
| HOUR13 | -6.469848 | 20.484835 | -0.315836 | 0.752 |
| HOUR14 | -0.715793 | 20.944769 | -0.034175 | 0.973 |
| HOUR15 | -21.005422 | 21.612505 | -0.971911 | 0.331 |
| HOUR16 | -31.663754 | 22.349588 | -1.416749 | 0.157 |
| HOUR17 | -53.784751 | 22.928491 | -2.345761 | 0.019 |
| HOUR18 | -46.545957 | 23.589331 | -1.973178 | 0.049 |
| HOUR19 | -67.366300 | 24.386175 | -2.762479 | 0.006 |
| HOUR20 | -50.770274 | 25.344673 | -2.003193 | 0.045 |
| HOUR21 | -32.636996 | 26.269910 | -1.242372 | 0.214 |
| HOUR22 | -49.948290 | 26.892747 | -1.857315 | 0.063 |
| HOUR23 | -61.635293 | 26.958723 | -2.286284 | 0.022 |
| HOUR24 | -99.786017 | 26.564066 | -3.756429 | 0.000 |
| WEEKEND | -468.268584 | 6.494619 | -72.101007 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|-----------|---------|
| 1 | 0.885547 | 0.009844 | 89.957920 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 17991.228707 | 1.000000 |
| 1 | 15933.924072 | 0.885650 |

Total Time for Computation and Printing: 0.05 (seconds)
 Number of Iterations: 5

convergence tolerance set to 0.00001

DEPENDENT VARIABLE: KWH
 Number of Observations: 2227
 R-squared: 0.971
 Standard Error of Estimate: 232.098
 Variance of White Noise Error (sigsq): 1926.287
 Variance of sigsq: 3332.358
 -2*log(likelihood): 23160.201

COEFFICIENTS OF INDEPENDENT VARIABLES (beta)

| Var | Coef | Std. Error | t-Ratio | P-Value |
|---------|-------------|------------|------------|---------|
| CNST | 717.064890 | 209.259681 | 3.426675 | 0.001 |
| INTER | -0.468929 | 0.333280 | -1.407013 | 0.160 |
| JULY | -16.440141 | 43.046216 | -0.381918 | 0.703 |
| MAY | -53.035437 | 70.042196 | -0.757193 | 0.449 |
| JUNE | -55.558076 | 58.394773 | -0.951422 | 0.341 |
| TEMP | -2.769482 | 2.256703 | -1.227225 | 0.220 |
| HUMID | -3.550217 | 2.900021 | -1.224204 | 0.221 |
| TEMPHUM | 0.044947 | 0.037336 | 1.203865 | 0.229 |
| TLAG | -0.174645 | 0.487174 | -0.358486 | 0.720 |
| TLAG2 | 0.163970 | 0.486641 | 0.336943 | 0.736 |
| TLAG3 | 0.550386 | 0.484572 | 1.135818 | 0.256 |
| TLAG4 | -0.171541 | 0.480001 | -0.357376 | 0.721 |
| TLAG5 | 0.603328 | 0.479447 | 1.258382 | 0.208 |
| HLAG | -0.828354 | 0.611171 | -1.355355 | 0.175 |
| HLAG2 | 0.663563 | 0.611188 | 1.085692 | 0.278 |
| HLAG3 | 0.279486 | 0.611454 | 0.457085 | 0.648 |
| HOUR1 | -116.231077 | 14.655784 | -7.930731 | 0.000 |
| HOUR2 | -159.571840 | 14.261124 | -11.189289 | 0.000 |
| HOUR3 | -186.630214 | 14.150756 | -13.188709 | 0.000 |
| HOUR4 | -196.943258 | 14.180741 | -13.888080 | 0.000 |
| HOUR5 | -119.796941 | 14.155184 | -8.463114 | 0.000 |
| HOUR6 | -51.839120 | 14.017082 | -3.698282 | 0.000 |
| HOUR7 | 13.299223 | 13.119777 | 1.013677 | 0.311 |
| HOUR8 | 26.578142 | 11.311951 | 2.349563 | 0.019 |
| HOUR9 | 10.649112 | 8.780573 | 1.212804 | 0.225 |
| HOUR10 | 23.312298 | 5.560147 | 4.192748 | 0.000 |
| HOUR12 | 17.082292 | 5.657107 | 3.019616 | 0.003 |
| HOUR13 | -1.126026 | 9.045915 | -0.124479 | 0.901 |
| HOUR14 | 6.742074 | 11.831911 | 0.569821 | 0.569 |
| HOUR15 | -10.492754 | 14.052951 | -0.746658 | 0.455 |
| HOUR16 | -18.280750 | 15.685603 | -1.165448 | 0.244 |
| HOUR17 | -38.460617 | 16.799989 | -2.289324 | 0.022 |
| HOUR18 | -30.107278 | 17.436662 | -1.726665 | 0.084 |
| HOUR19 | -50.579849 | 17.665699 | -2.863167 | 0.004 |
| HOUR20 | -31.983123 | 17.517182 | -1.825814 | 0.068 |
| HOUR21 | -10.155910 | 17.185491 | -0.590958 | 0.555 |
| HOUR22 | -23.513948 | 16.740702 | -1.404597 | 0.160 |
| HOUR23 | -31.625517 | 16.060318 | -1.969171 | 0.049 |
| HOUR24 | -68.820367 | 15.293775 | -4.499894 | 0.000 |
| WEEKEND | -43.317774 | 8.672527 | -4.994827 | 0.000 |

AUTOREGRESSIVE PARAMETERS (Phi)

| Lag | Phi | Std. Error | T-Ratio | P-Value |
|-----|----------|------------|------------|---------|
| 1 | 0.981958 | 0.004007 | 245.054703 | 0.000 |

AUTOCORRELATIONS AND AUTOCOVARIANCES

| Lag | Autocovariances | Autocorrelations |
|-----|-----------------|------------------|
| 0 | 53869.262373 | 1.000000 |
| 1 | 52897.351325 | 0.981958 |

**KyPSC Staff First Set Data Requests
Duke Energy Kentucky
Case No. 2007-00477
Date Received: November 20, 2007
Response Due Date: December 7, 2007**

KyPSC-DR-01-005

REQUEST:

Provide copies of any internal reports or utility-commissioned studies on the extent of untapped opportunities for additional demand-side management programs in Kentucky.

RESPONSE:

Following a reasonable investigation by interviewing the persons most likely to have such information, Duke Energy Kentucky, Inc. ("DE-Kentucky") could not locate any studies on the extent of untapped opportunities for additional demand-side management programs in Kentucky. The subject of renewables as a potential generating resource is discussed in the Company's most recent Integrated Resource Plan, relevant sections of which are produced as Attachment STAFF-DR-01-011.

WITNESS RESPONSIBLE: Richard G. Stevie

