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Witness: Richard Mark  
Sponsoring Party: Union Electric Company  
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**MISSOURI PUBLIC SERVICE COMMISSION**

**CASE NO. ER-2010-0036**

**SURREBUTTAL TESTIMONY**

**OF**

**RICHARD MARK**

**ON**

**BEHALF OF**

**UNION ELECTRIC COMPANY  
d/b/a AmerenUE**

**St. Louis, Missouri  
March, 2010**

CO. Exhibit No. 141  
Date 3/26/10 Reporter PF  
File No. ER-2010-0036

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1 **SURREBUTTAL TESTIMONY**

2 **OF**

3 **RICHARD MARK**  
4

5 **CASE NO. ER-2010-0036**

6 **Q. Please state your name and business address.**

7 A. My name is Richard Mark. My business address is One Ameren Plaza,  
8 1901 Chouteau Avenue, St. Louis, MO 63103.

9 **Q. By whom and in what capacity are you employed?**

10 A. I am employed by AmerenUE as Senior Vice President Customer Operations.

11 **Q. Are you the same Richard Mark who filed rebuttal testimony in this case**  
12 **on February 11, 2010, direct testimony concerning low-income customers on**  
13 **February 19, 2010 and additional rebuttal testimony on February 26, 2010?**

14 A. Yes, I am.

15 **Q. Do you have any additions or corrections to your additional rebuttal**  
16 **testimony on low-income customers?**

17 A. Yes. On page 6, line 12 there is a typo. The Dollar More Program has  
18 assisted 135,000 families instead of 1,350,000.

19 **Q. What is the purpose of your surrebuttal testimony?**

20 A. I am responding to the rebuttal testimony of Maurice Brubaker on behalf of  
21 Missouri Industrial Energy Consumers (MIEC), Barbara Meisenheimer of the Office of  
22 Public Counsel (OPC or Public Counsel), Jacqueline Hutchinson on behalf of AARP and the  
23 Consumers Council of Missouri (AARP) and Anne Ross of the Commission Staff. I will also

1 briefly touch on issues related to our Lighting & Appliance program as raised by John  
2 Rogers of the Commission Staff.

3 *I. Response to Office of Public Counsel*

4 **Q. Do you agree with the rebuttal comments filed by the OPC regarding**  
5 **offering a low-income program?**

6 A. No.

7 **Q. On what points do you disagree with OPC?**

8 A. Ms. Meisenheimer contradicts her original testimony where the OPC did not  
9 propose a low-income program. ("Public Counsel has not proposed a low-income program  
10 in this case pending evaluation of the success of other experimental programs."<sup>1</sup>)  
11 Ms. Meisenheimer set forth a three-prong approach that could be adopted, but did not  
12 recommend adoption of the program. In her rebuttal testimony, Ms. Meisenheimer changed  
13 her position to recommend that AmerenUE adopt an experimental low-income program that  
14 will address heating affordability and added a hot weather component to the proposed  
15 program. In her direct testimony, she stated that due to legal and policy considerations,  
16 Public Counsel took no position on whether "very low income" should be the basis for  
17 establishing a unique customer class.<sup>2</sup> She then went on to say that there is a need to balance  
18 low-income and energy efficiency programs to ensure Missouri's utility consumers pay rates  
19 that are just and reasonable.<sup>3</sup> In her rebuttal testimony she outlines the magnitude and cost of  
20 a low income program, but she does not address how adoption of such a program would  
21 preserve the balance her earlier testimony set forth, and as a result I view her proposed  
22 program as a contradiction with her earlier testimony.

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<sup>1</sup> ER-2010-0036, direct testimony of Barbara A. Meisenheimer, February 19, 2009, p. 2.

<sup>2</sup>Id., p. 2.

1           **Q.     Does Public Council offer any suggestions for funding the program**  
2 **Ms. Meisenheimer is proposing?**

3           A.     Yes. Ms. Meisenheimer suggests voluntary funding such as Dollar More. In  
4 her rebuttal testimony, Ms. Meisenheimer proposes a pilot program expanded to include a  
5 summer cooling component. I want to reiterate points I made in my direct testimony.<sup>4</sup> That  
6 is, using funding sources such as Dollar More, I believe is inappropriate and possibly illegal.  
7 Dollar More is funded by dollars voluntarily contributed by customers, employees and the  
8 Company, and to redirect those funds to another purpose would not be appropriate.

9           **Q.     Do you believe a low-income program as proposed by OPC will address**  
10 **the concerns you heard during the local public hearings?**

11          A.     No. The customers that I heard at the seven local public hearings I attended  
12 appeared to be primarily senior citizens on fixed incomes who typically pay their bills. Their  
13 concerns stemmed from the amount of the increase requested and the fact that they will not  
14 receive a cost of living increase in their social security checks this year. In my opinion, most  
15 of the customers who testified would not fall into a "very low income" category and  
16 therefore would not benefit from the program OPC proposed or from any of the programs  
17 proposed in compliance with the Commission's directive to focus on a very low income  
18 class.

19          **Q.     If the Commission does decide to implement a pilot program to help very**  
20 **low income customers in this case, what would you recommend?**

21          A.     Both Kansas City Power & Light Company and The Empire District Electric  
22 Company have designed pilot programs to serve low-income customers. These utilities offer

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<sup>3</sup> Id, p. 5.

<sup>4</sup>Case No. ER-2010-0036, Richard Mark rebuttal testimony, p. 6.

1 a fixed dollar credit (between \$20 and \$50 per month) to a limited number of customers  
2 (a maximum of 1,000 customers in each case), who are qualified by third party social service  
3 agencies. If the Commission does decide to implement a similar program for AmerenUE, the  
4 amount budgeted for the pilot program should be included in the Company's cost of service,  
5 and the additional summer cooling component should be omitted from the program.

6 **Q. Are there any statistics or results of studies which would suggest that the**  
7 **elderly or financially disadvantaged are reluctant to utilize their air conditioning units**  
8 **on hot days?**

9 A. Not really. AmerenUE collaborated with the United Way, Missouri  
10 Department of Health and Senior Services, National Weather Service, Missouri Association  
11 of Community Action, St. Louis and Mid-East Area Agencies on Aging as well as others to  
12 implement a program geared to senior citizens that emphasized safety and health during the  
13 hottest times of the summer. The program, called Meet the Heat Head On (Meet the Heat),  
14 included a 2008 survey of Missouri senior citizens and another survey done in 2009 that  
15 focused on low-income seniors. I have attached the report from the 2009 survey to my  
16 testimony as RJM-SR7. The 2008 survey was attached to my rebuttal testimony in Case No.  
17 ER-2008-0318 as Schedule RJM-RE3.

18 The surveys asked senior citizen customers of AmerenUE if they cooled their  
19 residences during summer months. In 2008, 79% used an air conditioner (a/c) and 18%  
20 stated they used both a/c and fans. In 2009, 75% used an a/c and 19% said they used both.  
21 These senior citizens were then asked if they routinely run their air conditioning units during  
22 heat waves. 97% said yes in 2008 and 2009.

1           The concern over high cooling costs does not preclude senior citizens, who  
2   can have the greatest health risk, from turning on their air conditioners. Adding a cooling  
3   component to any low-income program that is implemented will only increase the cost of the  
4   program and further burden social service agencies administering it.

5           **Q.    Do you believe that low-income program costs should be included in**  
6   **AmerenUE's revenue requirement and spread across all customer classes?**

7           A.    Yes, I do. The other residential customers are not the causers of this cost any  
8   more than are the members of our other customer classes, so if the Commission finds it  
9   appropriate to impose this pilot, it makes the most sense to spread the cost among all of  
10   AmerenUE's customer classes.

11   ***II.    Response to AARP and Consumers Council of Missouri***

12           **Q.    Do you agree with the recommendation to expand from a pilot or**  
13   **experimental program to a program that serves a larger number of eligible customers?**

14           A.    No. However, I do agree with Ms. Hutchinson's comments that more than a  
15   dozen pilot programs have been implemented over the last ten years to help low-income  
16   customers.<sup>5</sup> This comment supports our contention that the struggles that low-income  
17   customers face, including hunger, education, housing, medical and economic security, cannot  
18   be "fixed" by another low-income utility program. The poverty issue is bigger than a single  
19   energy issue. I also believe it means the Commission and other interested parties should  
20   review the results of those pilot programs to determine what aspects of each program worked  
21   and what aspects did not. This is important so that future programs implemented in Missouri  
22   do not repeat mistakes that may have been made in the past.

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<sup>5</sup> Case No. ER-2010-0036, rebuttal testimony of Jacqueline Hutchinson, p. 4.

1           **Q.     If the Commission directs AmerenUE to implement a low-income**  
2 **program, is AmerenUE willing to collaborate with interested stakeholders?**

3           A.     Yes.     AmerenUE has a long history of collaboration with various  
4 organizations that offer information, education and expertise in the low-income area.  
5 AmerenUE would be willing to collaborate again.

6           **Q.     Ms. Hutchinson states in her rebuttal testimony that the Commission**  
7 **needs to start somewhere to address poverty and the energy cost burden of low-income**  
8 **households.<sup>6</sup> Do you agree with her statement?**

9           A.     I agree that you have to start somewhere.     However, many governmental,  
10 private and public organizations and agencies have collected data, collaborated, proposed and  
11 implemented “solutions” yet the same issues persist for low-income customers.  
12 Ms. Hutchinson points out that more than a dozen of these programs have been initiated in  
13 the last ten years and they did not solve the problem.     I am not sure how one additional pilot  
14 program will provide the solution.

15                     In my opinion, changing building codes, requiring better energy efficiency,  
16 construction, insulation and energy efficient appliances for government subsidized housing  
17 would do more to reduce the long-term energy burden on low-income customers than a mish-  
18 mash of assistance programs.

19           **Q.     Ms. Hutchinson cites various statistics from reports regarding energy and**  
20 **poverty in her testimony. Do you have any comments regarding her statements?**

21           A.     Ms. Hutchinson states in her rebuttal testimony<sup>7</sup> that home energy rates  
22 increased by 40% between 2000 and 2005, while there was little growth in income over the

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<sup>6</sup> Id., p. 8.

<sup>7</sup> Id., p. 7.



1 past ten years. Her testimony goes on to say that these factors would indicate that the high  
2 cost of utility service is a primary contributor to poverty and must be included in the solution.  
3 However, it should be noted that Ms. Hutchinson is not citing a study specific to Missouri.  
4 In fact, between 2000 and 2005, AmerenUE's residential summer rates actually decreased by  
5 9% (2000=\$.0719, 2005=\$.0652) and are currently still 40% below the national average.

6 In addition, Business Week magazine published an article titled, "*Power*  
7 *Surge*" that showed electricity prices and the percent change by state from 2000 to 2008.  
8 Missouri was the only state to show a price decrease during that period of time. Studies of  
9 states that have electric rates 40% higher than Missouri are unrealistic and misleading in this  
10 context. This article is attached to my testimony as Schedule RJM-SR8.

11 I agree that there will always be costs to serve low-income customers.  
12 However, AmerenUE has historically taken the approach of controlling costs and being a low  
13 cost energy provider (compared to U.S. averages). We work to lessen the cost of energy for  
14 all customers we serve, including our low-income customers.

15 A recent review of 2009 AmerenUE's LIHEAP customer usage and bills  
16 showed that our average LIHEAP customer has an average usage of 1,384 kWh/month and  
17 pays an average of \$90.51 per month. However, the average AmerenUE customer uses 1,103  
18 kWh per month. This supports my comments above – low-income customers use more  
19 energy, for whatever reason, and yet still are only paying, on average, \$90.51 per month. For  
20 a customer to qualify for LIHEAP assistance they have an average monthly income of  
21 \$1,084-\$1,170 for a family of one (the amount used by agencies to determine LIHEAP). The  
22 chart below shows the average electric cost for an AmerenUE LIHEAP customer as a percent  
23 of income:

1

Household Size	Monthly Income @ 135% of Poverty	Average Monthly Electric Bill (UE LIHEAP customers 2009)	Average electric cost/monthly income
1	\$1084 - \$1170	\$90.51	8.3% - 7.7%
2	\$1,459 - \$1,575	\$90.51	6.2% - 5.7%
4	\$2,209- \$2,385	\$90.51	4.1% - 3.8%

2

3 Clearly, AmerenUE's electric bills do not impose an energy burden anywhere near the level  
4 cited by Ms. Hutchinson.

5 **Q. Ms. Hutchinson's rebuttal testimony included several quotes indicating**  
6 **that many states have adopted low-income programs without specific legislative**  
7 **directive. How do you respond?**

8 A. I can't testify as to the specifics of those states' laws and what those laws  
9 allow those Commissions to do. Under Missouri law, I am told by my attorneys, it is  
10 questionable whether the Commission has the authority to create a very low income class of  
11 residential customers for the purpose of setting electric rates at a lower level than is charged  
12 to other residential customers. If the Commission wishes to explore this question further, it  
13 will have to be done through legal counsel.

14 **Q. Do you have anything else to add?**

15 A. Yes. I agree with Ms. Hutchinson that any affordability program that is  
16 developed should require customers to participate in level payment plans, apply for LIHEAP  
17 and weatherization assistance, if applicable, and include energy efficiency education. If  
18 qualifying customers choose not to follow minimum requirements and agreements, then

1 funding should be terminated and the customer should no longer be allowed to participate in  
2 the program.

3 ***III. Response to Staff***

4 **Q. Do you agree with Staff witness Anne Ross' statement that the**  
5 **Commission should set up a collaborative process that is outside of this rate case to**  
6 **address the low income issue?<sup>8</sup>**

7 **A. I do agree with Staff's recommendation and agree that a collaborative process**  
8 **could be used to address the Commission's concerns.**

9 **Q. Staff summarized and commented on OPC's testimony outlining the**  
10 **parameters for a low-income program. Ms. Ross' rebuttal testimony stated concerns**  
11 **regarding the limited scope (1,200 low-income customers), however agreed that a**  
12 **properly designed bill credit program could be effective. Do you agree?**

13 **A. I agree, as stated earlier in my testimony, that the impact on the small number**  
14 **of customers who would benefit from their proposed designed bill credit program would be**  
15 **short- term and minimal. Staff estimates that somewhere between 50,000 and 310,000**  
16 **customers could be eligible. Staff goes on to say that since every AmerenUE residential**  
17 **customer will bear the cost of this program, including other low-income ratepayers, the**  
18 **Commission must decide whether the benefits of implementing such a program outweigh the**  
19 **costs.<sup>9</sup> I agree.**

20 **Q. Staff suggests that before any additional ratepayer money is used for**  
21 **another experiment, that lessons learned from previous programs be addressed. Do**  
22 **you concur?**

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<sup>8</sup> Case No. ER-2010-0036, Anne Ross rebuttal, p. 1.

<sup>9</sup> Anne Ross rebuttal, p. 5.

1           A.     I do. Lessons learned and best practices should be considered in designing  
2 any new program. Staff's suggestion to look at past and current bill credit programs makes  
3 sense. I also believe a collaboration to develop a best practice report to be submitted to the  
4 Commission could avoid costly mistakes and administrative concerns. In addition, it will  
5 give all interested parties an opportunity to implement steps necessary to execute a new  
6 program and place measurement and control processes in place. It is also consistent with  
7 OPC's direct testimony on this issue.

8 ***IV.     Response to Missouri Industrial Energy Consumers***

9           **Q.     Mr. Brubaker, in his rebuttal testimony, seems to share AmerenUE's**  
10 **concern that the creation of a low-income residential rate could be at odds with**  
11 **Missouri law. Do you agree?**

12          A.     Yes, as I have previously explained, there may be legal obstacles with the  
13 Commission setting up a very low income class which is charged a lower rate for electricity  
14 than other residential customers. Mr. Brubaker agrees that this issue is better addressed at  
15 the Missouri legislature and that low-income customers' problems stem more from a lack of  
16 income than from the rates charged by AmerenUE. Finally, Mr. Brubaker agrees that it  
17 would be more effective to study the results of the various pilot programs in effect at all  
18 Missouri utilities before merely creating another pilot at this time.

19          **Q.     Do you agree with MIEC's testimony that all customer classes should not**  
20 **share in the cost of a pilot program?**

21          A.     No, I do not. If the Commission determines that a low-income program is  
22 appropriate, then all AmerenUE customer classes should share in the cost of such a program.

1 As I stated above, it is not a cost that can be linked to any one customer class and so should  
2 be shared by all of AmerenUE's customer classes.

3 *V. Energy Efficiency*

4 **Q. Did you review the portion of the rebuttal testimony of Staff witness John**  
5 **Rogers which dealt with AmerenUE's partnering with Operation Food Search (OFS) to**  
6 **give income qualified families two free CFL bulbs?**

7 A. I did. I find some irony in the fact that the Commission has asked the parties  
8 to look at the development of a low-income rate class because of their very real concern that  
9 some of our customers cannot afford a rate increase and, at the same time, Staff does not  
10 support an energy efficiency program that puts energy efficient light bulbs, CFLs, into the  
11 homes of our low-income customers at no cost to those customers.

12 **Q. Please explain how this event worked.**

13 A. AmerenUE gave OFS 20,000 13-watt CFLs and 20,000 23-watt CFLs. Each  
14 OFS client received one of each type of CFL with their grocery allotment. AmerenUE  
15 undertook this effort as part of its Lighting and Appliance program, which allows the  
16 Company to buy down the cost of energy efficiency measures and to work with community  
17 based organizations in providing qualifying products or services to end-users. In total,  
18 AmerenUE spent approximately \$59,600 on the event. The Company placed the cost in the  
19 energy efficiency regulatory asset and will evaluate the effectiveness of this in its yearly  
20 program evaluation.

21 Sunny Schaffer, Executive Director of OFS, has indicated to the Company  
22 that some of their clients clapped when they were told they would receive the free light  
23 bulbs. Many clients indicated that they wanted to use CFLs but because of financial

1 struggles, most could only afford to buy the least expensive light bulbs, which are inefficient  
2 and burn out quickly. This program was an innovative approach, which works within the  
3 guidelines of our Lighting and Appliance tariff. AmerenUE would like to build upon this  
4 experience, but Staff's reluctance to support our efforts may force us to rethink this type of  
5 program.

6 **Q. Staff termed this as a "donation." Is that a correct characterization?**

7 A. If by "donation" one means a donation for tax purposes, we are not proposing  
8 to treat it in that manner. The money spent on the bulbs was less than the amount AmerenUE  
9 could spend on incentives, so the Company provided the bulbs at no cost to OFS.

10 **Q. Ms. Ross' rebuttal testimony also mentioned a donation of CFL bulbs to**  
11 **the City of St. Peters. Has this occurred?**

12 A. No, it has not. The City of St. Peters approached AmerenUE with a proposal  
13 to include CFL bulbs as a supplement to their American Recovery and Reinvestment Act of  
14 2009 (ARRA) program to promote energy efficiency efforts. This effort has not yet  
15 happened and there are no costs in the updated test year for these bulbs.

16 **Q. Does this conclude your surrebuttal testimony?**

17 A. Yes, it does.

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the Matter of Union Electric Company d/b/a      ) Case No. ER-2010-0036  
AmerenUE's Tariffs to Increase its Annual        ) Tracking No. YE-2010-0054  
Revenues for Electric Service.                    ) Tracking No. YE-2010-0055

**AFFIDAVIT OF RICHARD MARK**

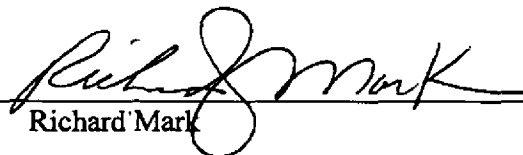
STATE OF MISSOURI    )  
                                  ) ss  
CITY OF ST. LOUIS    )

Richard Mark, being first duly sworn on his oath, states:

1. My name is Richard Mark. I work in the City of St. Louis, Missouri, and I am employed by AmerenUE as Senior Vice President Customer Operations.

2. Attached hereto and made a part hereof for all purposes is my Surrebuttal Testimony on behalf of Union Electric Company d/b/a AmerenUE consisting of 12 pages and Schedules RM-SR 7 through RM-SR 8, all of which have been prepared in written form for introduction into evidence in the above-referenced docket.

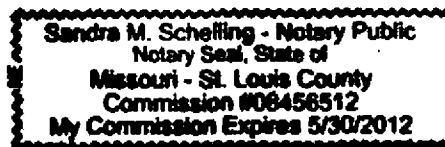
3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.

  
Richard Mark

Subscribed and sworn to before me this 4<sup>th</sup> day of March, 2010.

  
Notary Public

My commission expires: 5/30/2012



## **Survey Report**

### **Elderly & Heat Hazard Follow-up Survey AmerenUE/Missouri Public Service Commission**

**Center for Advanced Social Research  
School of Journalism  
University of Missouri-Columbia  
October 2008**

#### **Introduction**

To examine the effect of an educational campaign for elderly people to better prepare for extreme heat during hot summer months in August and September 2008, 204 telephone interviews out of the 405 the elderly respondents who participated in the baseline survey in June and July 2008 were completed by the Center for Advanced Social Research of University of Missouri-Columbia in October 2008. The survey was sponsored by AmerenUE.

#### **Survey Instrument**

The survey instrument was developed by researchers of AmerenUE. It was designed to collect the following information.

- Method of cooling residential households during summer months
- Usage of air conditioning during summer months and "heat waves"
- Experience with electric service providers
- Knowledge of the symptoms of a heat stroke
- Personal contact with family members, relatives, or neighbors
- Preferred primary sources of information about public services
- Awareness and evaluation of the educational campaign "Meet the Heat"
- Demographic information

#### **Sampling Methodology**

The 2008 Elderly & Heat Hazard *Follow-Up* Survey was based on the database of the 405 elderly respondents who were 60 years of age or older and participated in the baseline survey in June and July 2008. The interviews were conducted with those (n = 286) who agreed to participate in a follow-up study.

At least fifteen attempts were made to complete an interview at every sampled telephone number. The calls were scheduled over days of the week to maximize the chances of making a



contact with a potential respondent. All refusals were recontacted at least once in order to attempt to convert them to completed interviews.

### **Field Operation**

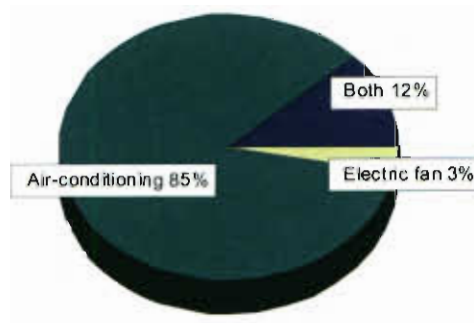
Two hundred and four (204) interviews were completed via telephone in October 15-20, 2008 by the trained interviewing and supervising staff of the Center for Advanced Social Research of University of Missouri's School of Journalism.

## Survey Findings

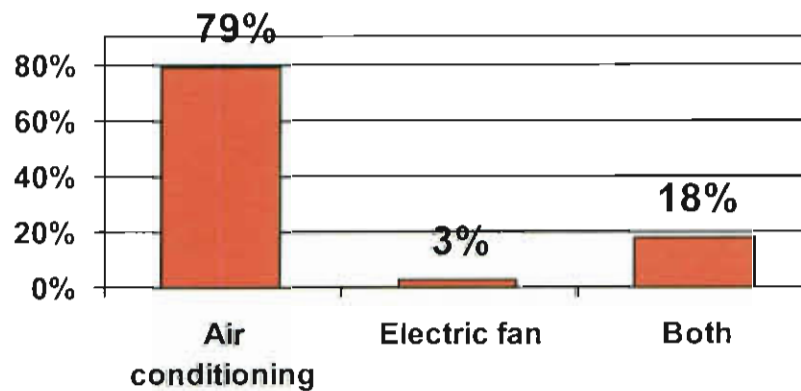
### Method of cooling residential households during summer months

In the baseline survey, 85% of the 405 respondents reported that they cooled their residence during summer months with air-conditioning, three percent relied on electric fans, and 12% used both.

How you cool your residence during summer months? (n = 405)



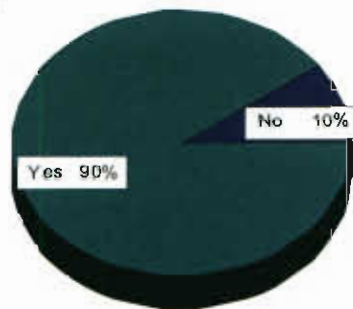
How you cool your residence during summer months?  
[n = 204]



In the follow-up survey, 79% of the 204 respondents said they used air conditioning, three percent electric fan, and 18% both.

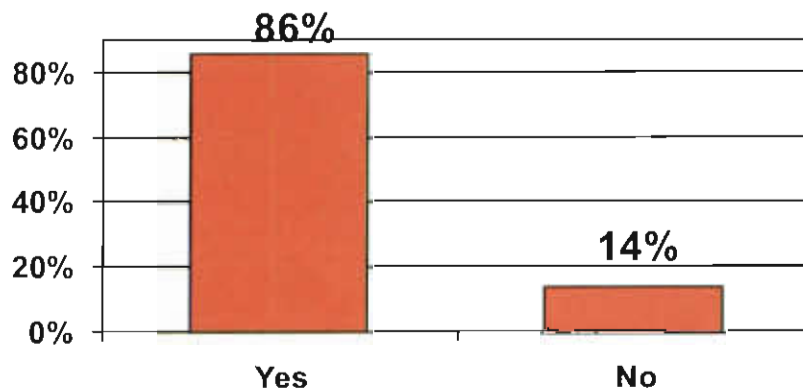
### Usage of air conditioning during summer months and “heat waves”

During the summer months, do you routinely run your air-conditioning unit? (n = 391)



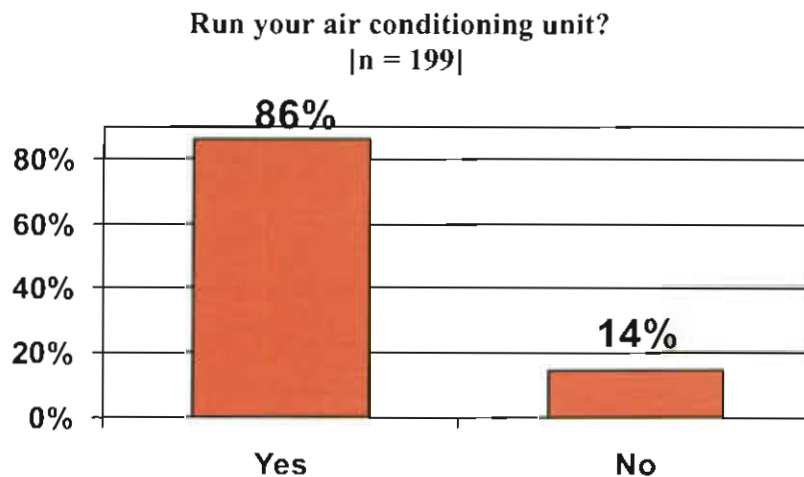
Ninety percent (90%) of those who had air conditioning or electric fans routinely run their air conditioning units during the summer months in the baseline survey. Similarly, 86% of the 204 respondents in the follow-up survey did so.

During the summer months, do you routinely run your air conditioning units?  
[n = 199]



As shown on the next page, 86% of the respondents in the follow-up survey routinely run their air conditioning units *during the last summer months*.

During the last summer months, did you routinely



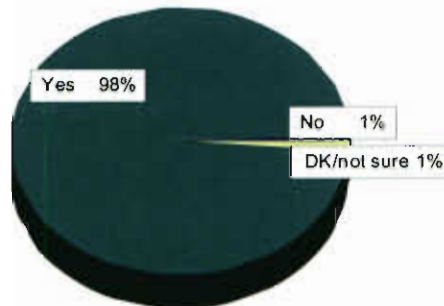
As shown in Table 1, 31% of the respondents with air conditioning in the baseline survey routinely turned on their air conditioning when the outside temperature was in the 70s, 47% in the 80s, three percent in the 90s, and one percent in the 60s. It should be noted that 11% of the respondents either were not sure or did not know. Also displayed are results of the follow-up survey.

**TABLE 1: Approximately at what temperature do you routinely turn on your air conditioning?**

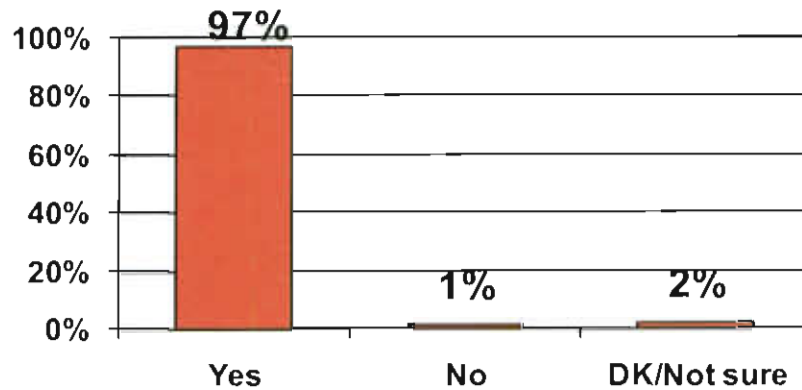
Categories of temperature	Percent (%) [Baseline] [n = 353]	Percent (%) [Follow-up] [n = 177]
In the 60s	1.4	0.6
In the 70s	30.9	52.0
In the 80s	46.5	38.0
In the 90s	3.4	2.9
Don't know/Not sure	11.3	4.1
Others	6.5	2.3

When asked “*Do you routinely run your air conditioning unit during ‘heat waves,’ that is, the hottest days of the summer months?*” 98% of the people in the baseline survey said “yes,” one percent “no,” and another one percent “don’t know/not sure.” Similarly, in the follow-up study, 97% said “yes.”

Do you routinely run your air conditioning during "heat waves," ... ? (n = 392)

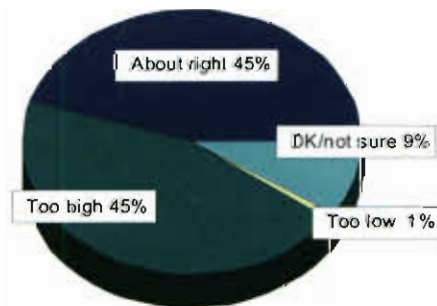


Do you routinely run your air conditioning unit during "heat waves" ... ?  
[n = 199]

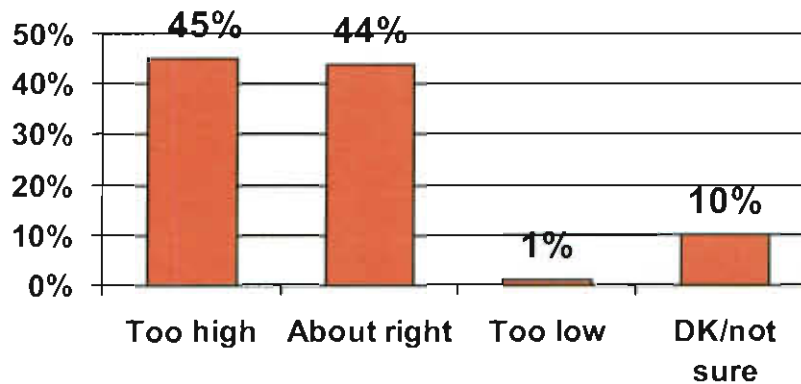


In the baseline survey, 45% of the respondents thought the daily cost to run their air conditioning was too high, another 45% just about the right amount, and one percent too low. About nine percent either were not sure or did not know.

Do you think the daily cost to run your air conditioning is? (n = 392)



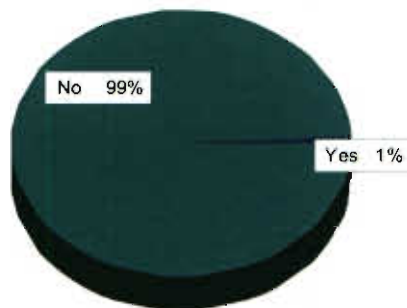
Do you think the daily cost to run your conditioning is?  
[n = 199]



#### Experience with electric service providers

In the baseline survey, very few people interviewed had their utilities disconnected because of slow or non-payment in the past year.

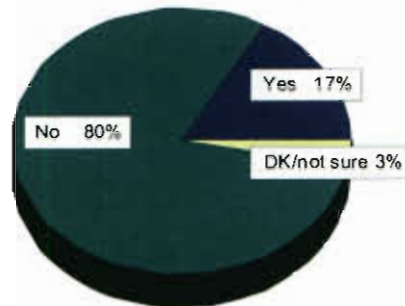
In the past year, have you ever had your  
utilities disconnected for slow ... ? (n = 405)



Similarly, in the follow-up survey, 98% said that they had not had their utilities disconnected for slow or non-payment in the past year.

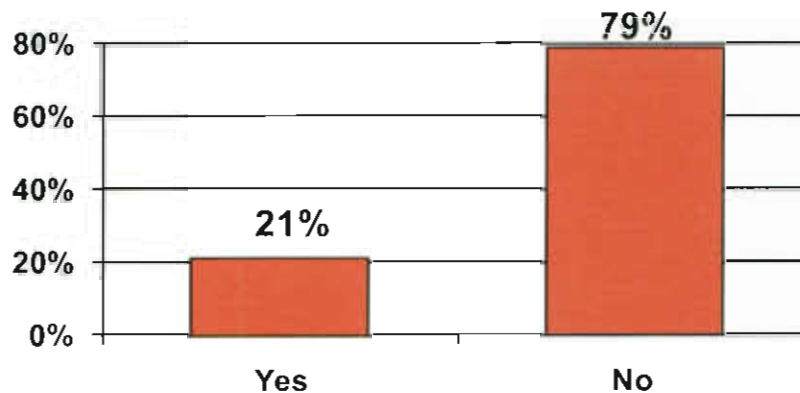
Meanwhile, there seemed to be impact of the current economic slowdown and higher energy costs on the mindset of the respondents in the baseline survey, as 17% of them were concerned about being unable to pay [their] utility company's electric bill during the summer, and 80% were not concerned. The result is presented on the next page.

**Are you concerned about being unable to pay your utility company's ... ? (n = 405)**



Of the 70 respondents who were concerned, 90% cited “having the money or budget” as their #1 concern.

**Are you concerned about being unable to pay your utility company's electric bill during the summer? [n = 201]**

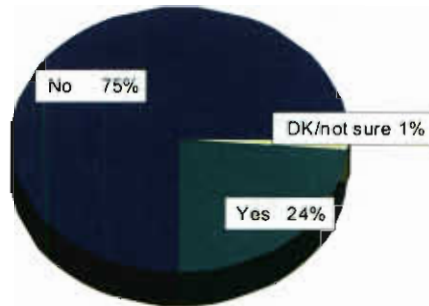


As shown above, in the follow-up survey, 21% of the respondents said they were concerned about being unable to pay their utility company's electric bill during the summer. Their concerns are presented in Appendix B – Open-Ended Responses.

#### **Knowledge of the symptoms of a heat stroke**

The next set of questions of the survey was designed to see if respondents had been concerned or worried about falling ill due to the heat during the hottest days of the summer months, and if they knew anything about the symptoms of a heat stroke.

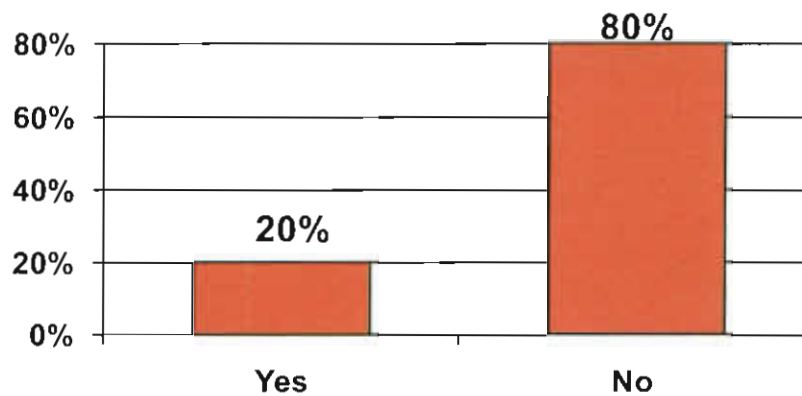
**Have you ever been concerned or worried  
you might fall ill due to the heat ...? (n = 405)**



In the baseline survey, nearly one-fourth of the respondents (24%) had been concerned or worried about falling ill due to the heat during the hottest days of the summer months, whereas three-fourth had not.

In the follow-up survey, one-fifth (20%) of the 204 respondents had been concerned or worried.

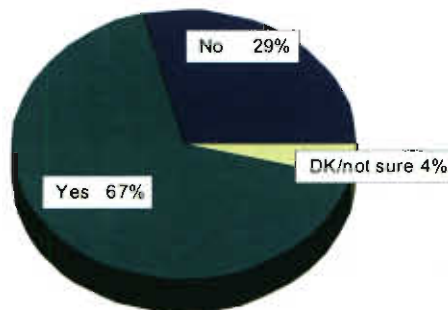
**Have you ever been concerned or worried that you might fall ill  
due to the heat during the hottest days of the summer months?  
[n = 204]**





**Do you know the symptoms of a heat stroke?**

(n = 405)

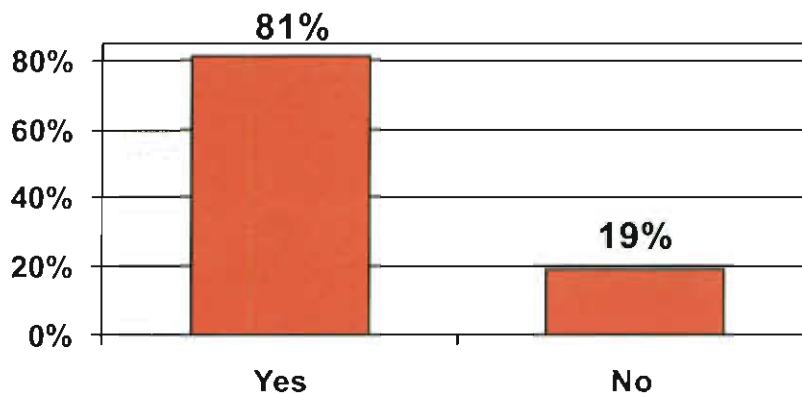


As shown above, 67% of the 405 respondents in the baseline survey thought they knew the symptoms of a heat stroke, and 29% did not. Majority of those who knew the symptoms (97%) specified the symptoms they knew of, and their responses are presented in Appendix B – Open-Ended Responses.

In the follow-up survey, 81% of the 204 respondents said they knew the symptoms of a heat stroke, and 97% of them provided the specific symptoms they knew of. Their responses can be found in Appendix B – Open-Ended Responses.

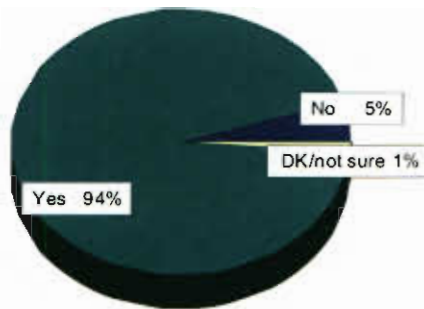
**Do you know the symptoms of a heat stroke?**

[n = 204]



When asked “*Do you have a plan to stay cool and keep yourself safe during the hottest days of the upcoming summer?*” 94% of the respondents in the baseline survey said “yes,” and five percent said “no.”

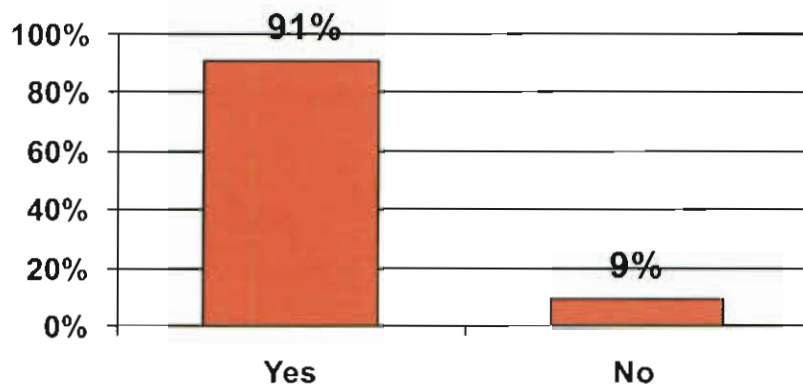
**Do you have a plan to stay cool and keep yourself safe during the hottest ...? (n = 405)**



And 98% of those who had a plan specified what they meant. Their responses can be found in Appendix B – Open-Ended Responses.

In the follow-up survey, when asked *did you have a plan to stay cool and keep yourself safe during the hottest days of last summer?* 91% of the 204 respondents said “yes”.

**Did you have a plan to stay cool and keep yourself safe during the hottest days of last summer?**  
[n = 204]

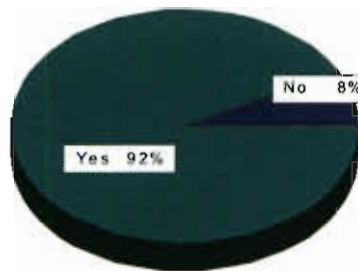


### Personal safety and evaluation of neighborhoods

Previous research suggests that risk factors such as personal safety, physical mobility, and social isolation, to name a few, more or less contribute to the high death rate among elderly people during hot summer months. As a result, respondents of the survey were asked the safety and evaluation of their neighborhoods in terms of access to public transportation, access to health care services, being close to friends or relatives, and etc.

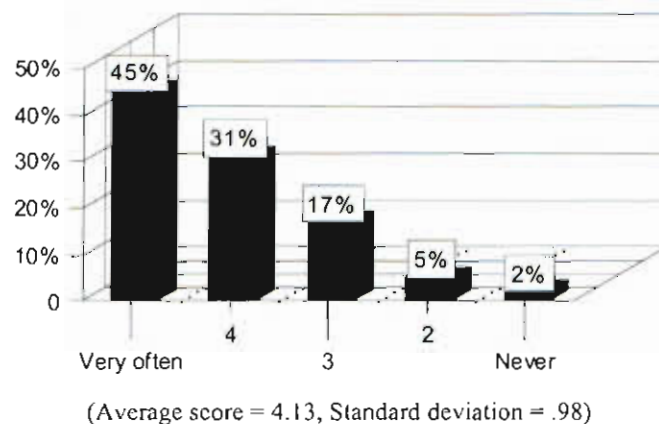
The baseline survey shows that most of the respondents did not seem to have social isolation, as 92% of them had a family member, relative, neighbor, or someone close that they could talk to or visit on a daily basis. In the follow-up survey, 91% of the 204 respondents had the connections.

Do you have a family member, relative, neighbor, or someone close ...? (n = 404)

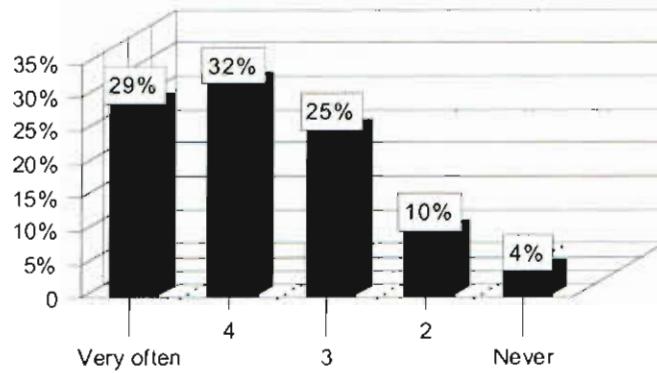


In addition, on a 5-point scale with “5” being “very often,” respondents gave an average score of 4.13 (standard deviation = .98) in responding to *How often do you get together with your family members or relatives?* and 3.70 (standard deviation = 1.12) to *How often do you get together with your neighbors or friends?* in the baseline survey. In the follow-up survey, respondents gave an average score of 4.11 to the first question, and 3.78 to the second item, very similarly to those in the baseline study.

How often do you get together with your family members or relatives? (n = 404)

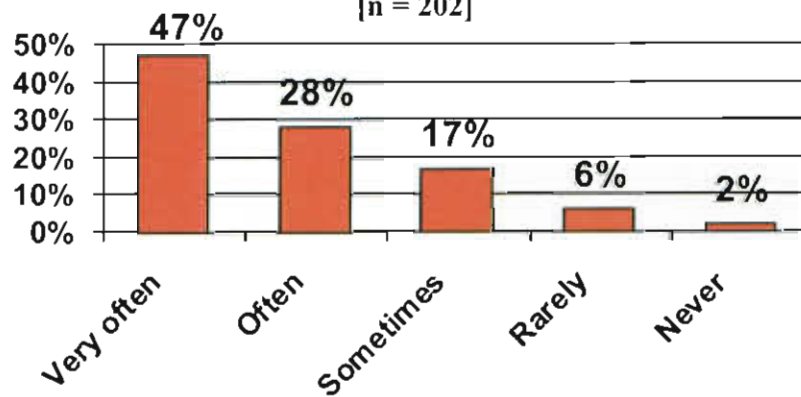


How often do you get together with your neighbors or friends? (n = 403)

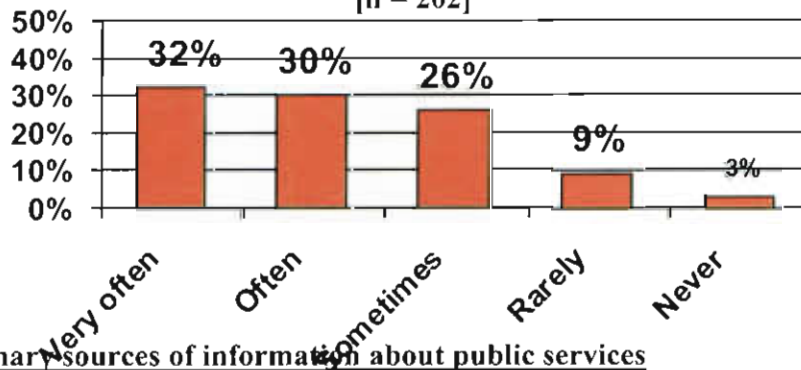


(Average score = 3.70, Standard deviation = 1.12)

How often do you get together with your family members or relatives?  
[n = 202]



How often do you get together with your neighbors or friends?  
[n = 202]



Preferred primary sources of information about public services

In the follow-up survey, respondents were asked to indicate their preferences in receiving public services related information. Tables display the “yes” percentages reported by the 204 respondents.

**TABLE 2: Preferences in receiving public service related information**

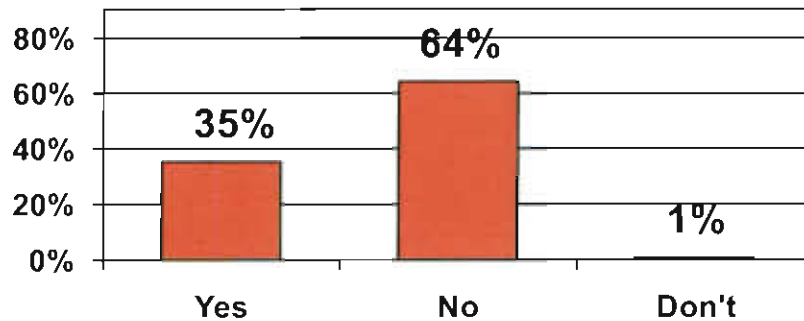
Description of preferences	“Yes” Percent (%)
Local television	27.0
Newspapers	17.2
Newsletters, brochures, & fact sheets	12.7
Radio	7.8
The Internet	5.4
Friends or family members	0.5
Social service agencies (meals on wheels)	1.5
Communication action agencies	1.0
Email	3.9
Community classes/Presentation	0.5
Billboards	n.a.
Video or tapes	0.5

**TABLE 3: Other Preferences**

Description of preferences	“Yes” Percent (%)
Mail	25.0
Telephone	3.4
Others – specify	19.1
Not checked	52.5

(n = 204)

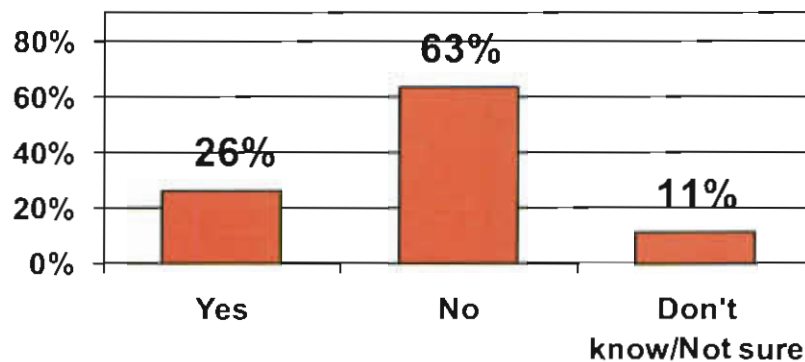
When asked *If you feel you need assistance in paying your monthly utility bill, do you know how to receive that assistance?* nearly two-third (64%) of the 204 respondents said “no,” and 35% “yes.” This finding alone suggests that, for those aged 60 or above, there is room for Ameren UE to carry out promotional or marketing activities if it is deemed important to inform the people of the assistance available to them.



**Awareness and evaluation of the educational campaign “Meet the Heat”**

As mentioned previously, one of the main purposes of the follow-up survey was to see how effective an educational campaign called “Meet the Heat” was in helping the elderly people better prepare for extreme heat during hot summer months.

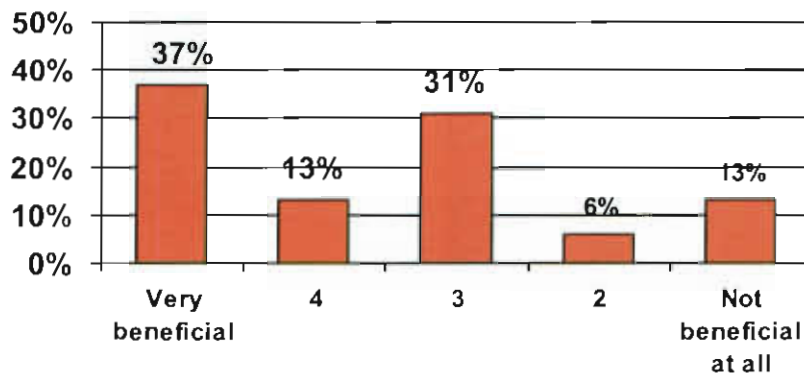
**Do you remember receiving any educational information  
entitled “Meet the Heat” that encouraged you to have a hot Weather Plan?  
[n = 204]**



Slightly more than one fourth (26%) of the 204 respondents reported that they remembered receiving the campaign information, and 63% did not. Eleven percent (11%) either were not sure or did not know.

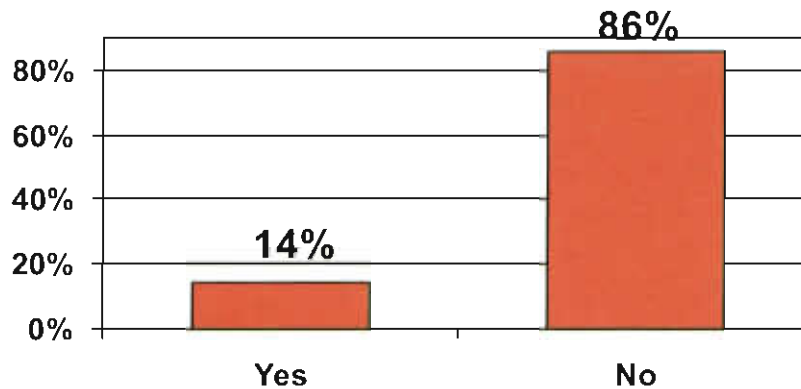
The 53 respondents who remembered receiving the campaign information were then asked how beneficial the information was to them personally. On a 5-point scale where 1 was not beneficial at all and 5 was very beneficial, they gave an average score of 3.54.

**How beneficial was the information to you personally?  
[n = 53]**



Next, the respondents were asked whether the information they had received caused them to do anything differently from before. As shown below, 14% said “yes,” and 86% said “no.” Caution, however, is recommended in interpreting the result, because the effective sample size ( $n = 53$ ) was small.

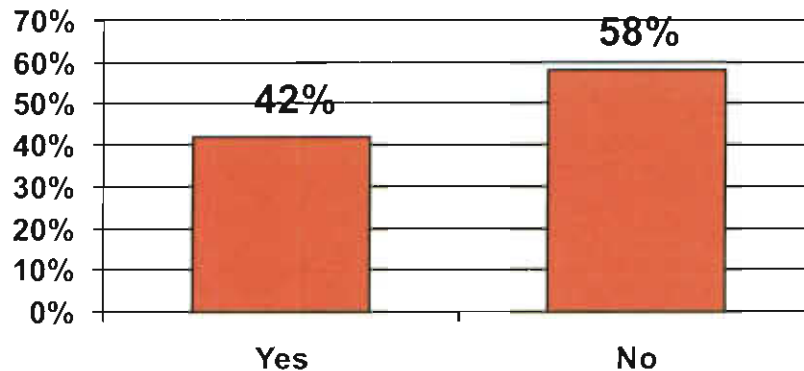
**Did the information you received cause you to act differently?**  
[ $n = 53$ ]



Of the 19 respondents (9% of the 204 people) who did not have a plan to stay cool and keep themselves safe during the hottest days of last summer, 42% said that they now have a plan. Again, caution needs to be taken in interpreting the result, because the effective sample size ( $n = 19$ ) was small.

**Do you now have a plan to keep you safe during the extremely hot days of summer?**

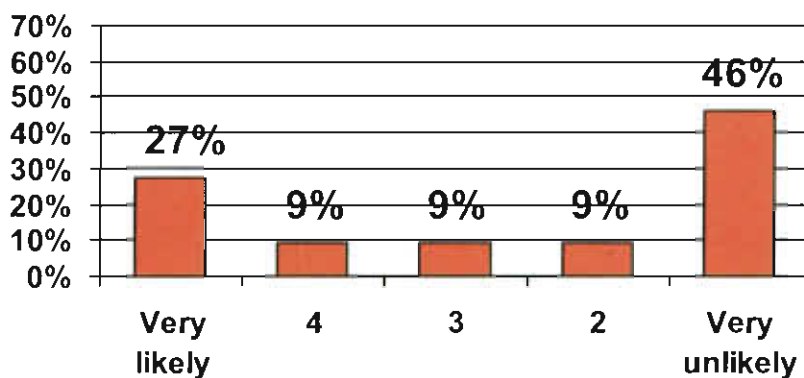
[n = 19]



Those (n = 11) who still do not have a plan were asked the likelihood of making plan. Below are their responses. Again, caution is recommended in interpreting the result, because the effective sample size (n = 11) was small.

**How likely do you think you will make a plan?**

[n = 11]



To make the survey an opportunity for Amercn UE to further disseminate the campaign message to the elderly people, those who were not aware of the campaign were asked if they would like to receive the information. Consequently, 76% of the 151 respondents said "yes." Of them, 95% provided their names and mailing addresses. They are presented in Appendix B – Open-Ended Responses.



## Demographics

In the end of the survey, demographic information such as age, education, ethnicity, home ownership, income, and gender was collected from the respondents. The purpose was to obtain a comprehensive profile of the survey participants for better understanding of the survey results.

### Number of adults

**TABLE 8: How many adults 18 or older, including yourself,  
Live in your household?**

Number of adults	Percent (%)
One	39.2
Two	49.0
Three or more	11.3
Refused	0.5

(n = 204)

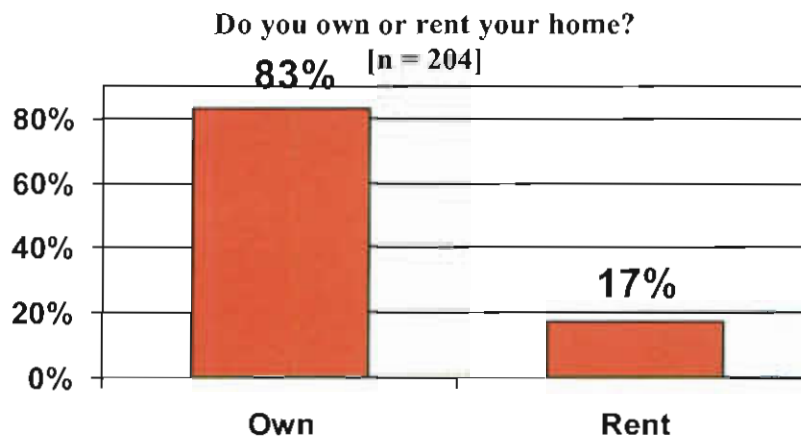
### Location of residence

**Location of residence**

Location of residence	Percent (%)
On a farm	2.9
Rural area/Not farm	10.3
Small town < 10,000 population	14.7
Medium town between 10,000 but < 40,000	14.2
Suburb or small city 40,000 but < 150,000	29.9
Urban area over 150,000 people	26.5
Don't know/Not sure	n.a.
Refused	1.0

(n = 204)

### Home ownership



## **Education**

**Level of Education**

Level of Education	Percent (%)
Less than high school	13.4
High school / GED	25.5
Vocational/technical/community college	5.4
Some university but no degree	20.6
4 year college degree	18.1
Some graduate work but no degree	3.4
Master's degree	11.3
Doctorate degree	1.5
Don't know/Not sure	n.a.
Refused	1.0

(n = 204)

## **Ethnicity**

**Ethnicity**

Categories of ethnicity	Percent (%)
White	84.3
African American	11.8
Latino/Hispanic	n.a.
Asian American	0.5
American Indian	0.5
Multiracial	1.5
Others – specify	1.0
Don't know/Not sure	n.a.
Refused	0.5

(n = 204)

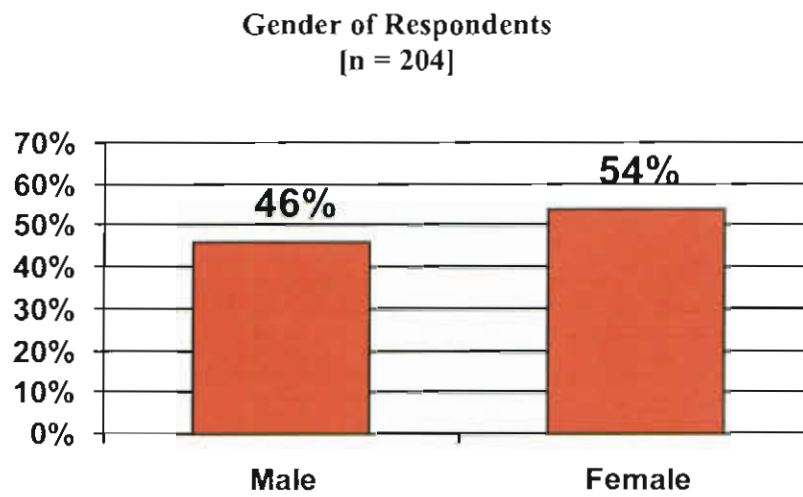
## **Income**

**Household Income**

Categories of Income	Percent (%)
Less than \$10,000	7.4
\$10,000 but less than \$25,000	19.1
\$25,000 but less than \$50,000	19.6
\$50,000 but less than \$75,000	16.2
\$75,000 but less than \$100,000	10.3
\$100,000 but less than \$125,000	2.9
\$125,000 or more	5.4
Don't know/Not sure	3.9
Refused	19.1

(n = 204)

## Gender



# Business Week Magazine Shows Missouri Rates To Be Among Nation's Lowest

