



**Summary Report**  
**Baseline Survey**  
**Consumer Knowledge, Practices, and Attitudes**  
**Electric Utility Deregulation and Consumer**  
**Choice**

**Consumer Information Disclosure Project**

**Kenneth Winneg**  
**Melissa J. Herrmann**  
**Chilton Research Services**

**Alan Levy**  
**Brian Roe**  
**U.S. Food and Drug Administration**

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## **About the Authors**

### **Ken Winneg**

Ken Winneg is Senior Research Manager at Chilton Research Services, where he is primarily responsible for public opinion research in the areas of government regulation, health care, social science, and politics. In addition to his work with the Regulatory Assistance Project, he has managed several labeling studies for the Food and Drug Administration. He also manages, along with Melissa Herrmann, Chilton's work on the ABC News/Washington Post polls.

Winneg holds a master's degree from the Annenberg School for Communication at the University of Pennsylvania and a bachelor's degree in political science from The George Washington University.

### **Melissa J. Herrmann**

Melissa J. Herrmann is Research Associate at Chilton Research Services, where she is responsible for working on public opinion research projects in the areas of government regulation, social science, and politics. She also manages, with Ken Winneg, Chilton's work on the ABC News/Washington Post polls.

Ms. Herrmann holds a master's degree from the Annenberg School for Communication at the University of Pennsylvania and a bachelor's degree in psychology and mass media/journalism from Rutgers College.

### **Alan S. Levy**

Alan Levy is chief of the Consumer Studies Branch in the Division of Market Studies, Center for Food Safety and Applied Nutrition at the U.S. Food and Drug Administration. He received a B.S. in physics from Michigan State University and a Ph.D. in social psychology from Columbia University in 1973. Before joining the FDA, he taught psychology at Duke University and was a project officer on government-sponsored survey projects at Market Facts. At FDA, Dr. Levy has worked on issues related to food labeling, food safety, weight loss practices, vitamin and mineral supplement use, infant feeding practices and nutrition education. Dr. Levy was elected to the board of directors of the Association for Consumer Research in 1996.

### **Brian Roe**

Brian Roe received his Ph.D. in Agricultural and Resource Economics from the University of Maryland and currently serves as a Staff Fellow for the Consumer Studies Branch, Center for Food Safety and Applied Nutrition at the U.S. Food and Drug Administration. His current research involves understanding consumer reaction to product information and quantifying the economic benefits associated with policies that regulate the flow of product information to consumers.

## **Forward**

### **The National Council and Its Research Agenda**

In November 1996, The National Council on Competition and the Electric Industry initiated its Consumer Information Disclosure Project to assist state regulators and legislators address consumer information needs in a competitive electricity environment. This effort followed on the heels of The National Association of Regulatory Utility Commissioners' November 1996 resolution calling for enforceable, uniform standards that would allow retail consumers to easily compare price, price variability, resource mix, and the environmental characteristics of their electricity purchases.

To implement this resolution, the National Council has initiated a multi-part research agenda. The research agenda is designed to identify and provide state regulators and legislators with technical information, consumer research and policy options. The tasks currently being undertaken are described below. A report, describing the result of the research, will be prepared for each of the tasks. Copies will be made available on the National Council's website as they become available.

**Task 1. Full Environmental Disclosure for Electricity: Tracking and Reporting Key Information.** This report identifies mechanisms to trace transactions from generators through sellers, aggregators or marketers to retail buyers to provide consumers with full resource mix and environmental characteristics disclosure. (Available 6/1/97)

**Task 2. Disclosure of Fuel Mix and Emissions by Retail Electric Service Providers: Issues of Confidentiality versus the Public Right to Know.** This report identifies the legal and policy considerations involving supplier's requests to keep information confidential versus the public interest in having the information publicly available to consumers and others. (Available 6/1/97)

**Task 3. Price and Service Disclosure.** This report will present standard options for comparing price information, risk, important contract terms and conditions, and consumer protection information in an uniform fashion.

**Task 4. Consumer Preferences from Focus Groups.** The current draft report summarizes the results from consumer focus groups conducted with participants in New Hampshire and Massachusetts retail competition pilot programs. Separate focus group reports will summarize interviews with consumers in California, Washington and Colorado. (Available 6/1/97)

**Task 5. Baseline Tracking Survey.** This report will describe a survey instrument to gather consumer information, knowledge, attitudes and practices relevant to retail electricity purchasing practices. The report will also summarize the initial, or baseline, data on these issues.

Task 6. **Disclosure Testing.** This report will summarize the results of disclosure testing conducted to measure consumer acceptance, ease of use, comprehensibility and task performance.

Task 7. **Research Synthesis.** This final report will summarize all of the disclosure related research and make final recommendations including model state statutes and regulations.

Task 8. **New England Disclosure Project.** This report summarizes the results of a seven month effort working with New England regulators and stakeholders to design uniform disclosure standards for the six state region. The report makes recommendations and includes proposed model rules.

## 1.0 Overview

The National Council on Competition and the Electric Industry consumer information disclosure project includes three types of consumer research, focus groups, baseline telephone survey, and disclosure testing. This three part consumer research effort was modeled after the consumer research that led to the now familiar food label.

This report summarizes the results of the national baseline telephone survey of 1,307 adults. The survey assess consumers' knowledge of and attitudes toward the current state of the electric industry and deregulation in general and toward the task of consumers choosing among competing sellers in a deregulated competitive environment.

The purpose of the baseline survey is to measure consumer knowledge, attitudes, and beliefs at the outset of competition. The survey is repeated from time to time to assess how consumer education, information disclosure, and product marketing effects consumer knowledge, attitudes, and beliefs. The information from this and subsequent surveys is useful in designing efforts to educate consumers.

The survey was conducted from September 9 to 22 by Chilton Research Services. See Appendix A for the survey questionnaire. Cross tabulations for all responses are available on the homepage of the National Council on Competition and the Electric Industry

## 2.0 Key Findings

### **2.1 Satisfaction with electricity suppliers is high, but the focus for improvement should be on suppliers' environmental concerns.**

Consumers throughout the country are quite satisfied with their electric suppliers. Of those surveyed:

- 91% are satisfied with electricity suppliers in general
- 68% are satisfied with the price charged for electricity; in New England, only 52% are satisfied
- 93% are satisfied with reliability of their electricity supplier
- 93% are satisfied with the overall service of their electricity supplier
- 77% are satisfied with the environmental concern or sensitivity of their electricity supplier; in New England slightly fewer (70%) are satisfied

However, these results do suggest some areas of improvement that deregulation can address. These areas are price and perceived concern for the environment.

Regarding price: People want to pay less. In fact, two-thirds think the prices are too high. Yet, a great majority is satisfied with the price they pay.

The public's satisfaction with the environmental concern of electricity suppliers is quite high, but relative to the other areas it is rated lower. The public feels it is critical that the electric companies address this concern. Nearly all consumers (96%) feel it is important that electric companies be environmentally responsible. In fact, 92% say that preserving the environment is important, even if it costs more. Furthermore, the public expects electric companies to care a lot about:

- the amount of air pollution they create (86%)
- the amount of water pollution they create (86%)
- the amount of renewable resources such as hydro-power, solar, and wind (78%)
- the amount of wildlife they may harm while producing electricity (80%)
- the amount of nuclear waste they create (85%)
- promoting energy conservation practices (85%)

Californians expectations, although very high, are significantly lower than the general public. Californians expect the electric companies to care a lot about:

- the amount of air pollution they create (78%)
- the amount of water pollution they create (79%)
- the amount of wildlife they may harm while producing electricity (72%)
- the amount of nuclear waste they create (78%)

Although no one area of concern absolutely stands out over the others as being important, consumers say companies should care most about the amount of nuclear waste they create (25%). The following table, Table 1, shows the percentage who rate each area of concern as most important:

**Table 1. Respondents' Opinions About What Electric Companies Should Care About**

<b>What Electric Companies Should Care Most About</b>	<b>National Percent</b>	<b>New England Percent</b>	<b>California Percent</b>
The amount of nuclear waste they create	25%	33%*	23%
The amount of air pollution they create	15%	14%	17%
The amount of water pollution they create	11%	10%	9%
Promoting energy conservation practices	11%	9%	19%*
The amount of wildlife or wildlife habitat they may harm while making electricity	11%	6%*	11%
The amount of renewable resources such as hydro-power, solar and wind they use	10%	13%	17%
All equal	10%	11%	4%
Unsure	5%	4%	1%

\* statistically significant difference when compared to general population

Other environmental concerns, include:

- A majority of consumers (52%) feel that global warming is a real concern
- Most believe pollution created during the production of electricity is relatively small, however, as a little more than seven in ten (72%) agree, at least somewhat, that other sources of pollution are greater. In New England, only 63% agree

Consumers believe the electric companies cannot protect the environment alone; they need the assistance and encouragement of the government. Nearly all consumers (89%) believe the government has an important role in protecting the environment. However, they are split down the middle over whether the government should regulate the electricity industry (49% agree vs. 49% disagree) specifically.

## **2.2 Customers' Knowledge about Their Electricity Supplier is low.**

Consumers lack knowledge about their electricity supplier outside of the amount of their bill. There is low knowledge about the specifics of their bill or about the energy sources for their electricity supplier.

### **Billing and Usage**

In general, besides the overall cost of their monthly bill, customers do not know much factual information about their electricity supplier or their own current energy usage.

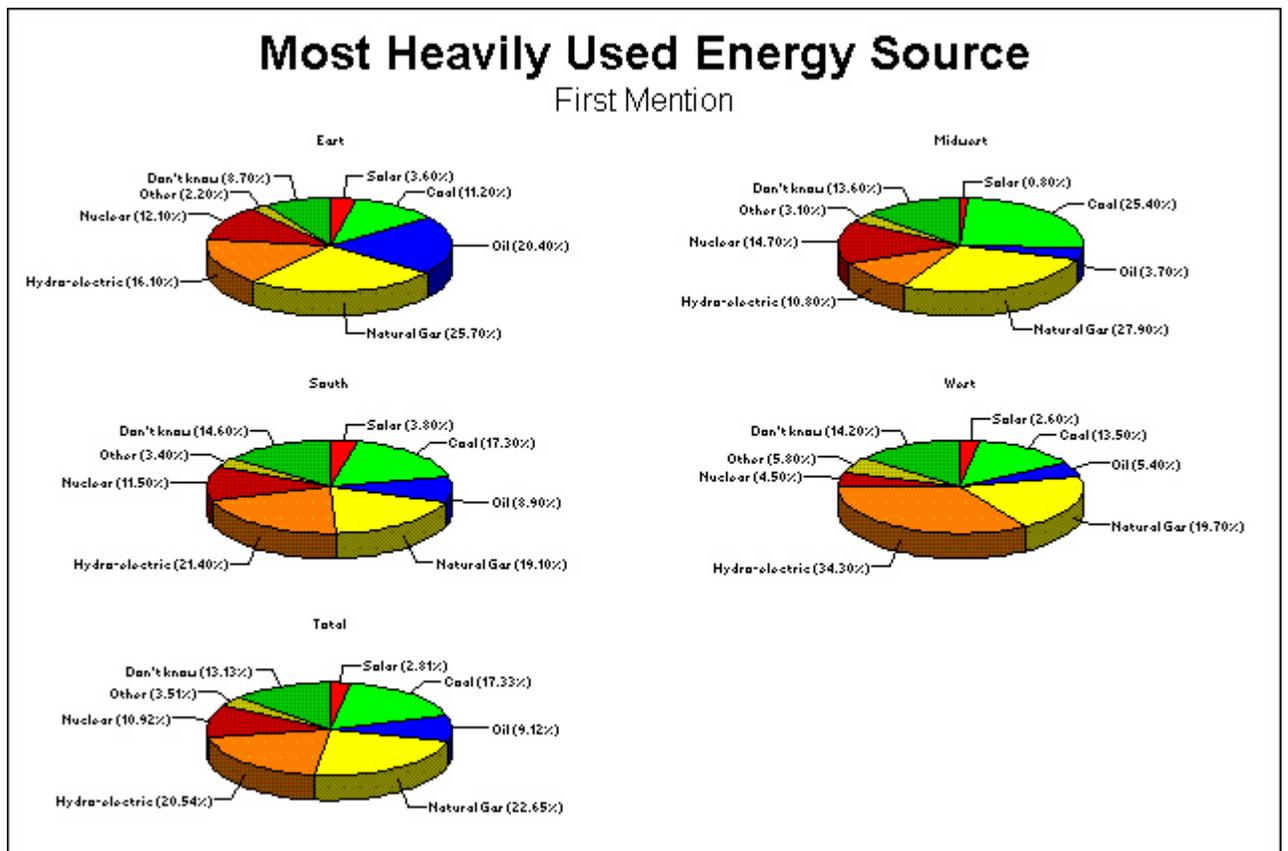
When asked how many kilowatt hours of energy they use per month, over three-quarters of consumers (77%) say they do not know. These percentages do not improve much when looking only at people who are responsible for paying their household's electric bill. Among bill payers, 76% are unaware of their kilowatt usage.

Similarly most consumers do not know how much they are charged per kilowatt hour. In total, 87% say they do not know how much they are charged. This percentage is slightly lower among bill payers (86%) and higher among non-bill payers (92%).

When asked what their total electricity bill was for the previous month, most people (94%) were able to guess. Of those who are responsible for paying their electric bill, 96% say they know the amount, whereas of those who are not the household electric bill payer, 25% say they do not know what the amount of their electricity bill was.

### Knowledge of Power Source

Consumers are also not very knowledgeable about the sources of their electricity. The following graph, Figure 1, shows the breakdown of the sources of energy that consumers think are most heavily used in their region:



When examining the actual primary sources of energy, there is a discrepancy compared to what people think that their electric suppliers most heavily use. The main source of

power nationally is coal. However, the majority of respondents did not name this source as the most heavily used in their area (East 11.2%, Midwest 25.4%, South 17.3%, West 13.5%). The following table combines consumers perceptions of the three most heavily used energy sources in their area. Nationally the top fuel sources and percentages are about: coal (60%), nuclear (20%), natural gas (10%), hydro-electric (8%) and oil (3%). Table 2 highlights that, in general, less than half of consumers in any region named any one of the top three sources.

**Table 2. Percentage of Consumers Believing Source Is One of the Top Three Sources Compared to the Actual Ranking of the Source**

Source	East		Midwest		South		West	
	Perceived	Actual	Perceived	Actual	Perceived	Actual	Perceived	Actual
	%	Rank	%	Rank	%	Rank	%	Rank
Coal	28%	2	42%	1	32%	1	23%	1
Nuclear	24%	1	29%	2	25%	3	17%	3
Natural Gas	50%	3	44%	3	40%	2	42%	4
Hydro-Electric	34%	4	26%	4	39%	5	51%	2
Oil	44%	5	18%	5	20%	4	18%	
Waste-to-energy	3%		4%		2%		1%	
Wood/ bio-mass	7%		4%		6%		5%	
Wind	2%		3%		3%		17%	5
Geo-thermal	4%		4%		3%		7%	
Solar	11%		9%		12%		10%	

\* Less than 0.5 %

### 2.3 Consumers feelings about energy sources

Consumers were asked to rate the same fuel sources on a scale from 1 to 5, where 5 means they like that fuel source very much and 1 means they do not like this fuel source at all. They also rated the sources on how harmful to the environment they thought they were. This rating was also done on a scale from 1 to 5, where 5 means not at all harmful and 1 means very harmful to the environment. The following results are overall:

**Table 3. Energy Source Preference and Environmental Impact Scores For Energy Sources**

<b>Source</b>	<b>Energy Source Preference Score</b>	<b>Environmental Impact Score</b>
Solar	4.26	4.44
Coal	2.29	2.40
Oil	2.57	2.42
Natural gas	3.72	3.33
Nuclear	2.22	2.27
Hydro-electric	3.87	3.69
Wind	3.97	4.28
Waste-to-energy	3.36	3.32
Wood or other bio-mass	2.75	2.74
Geo-thermal	3.38	3.43

\*The higher the score the more positive the rating was. The higher Energy Space Preference Score the higher their rating of how much they like the source of energy. The higher Environmental Impact Score the less harmful the respondent rated the source.

Consumers tend to rate the sources equally positively on their overall like or dislike of them in relation to how harmful they perceive they are to the environment. For example, consumers like solar power most and feel it is least harmful to the environment while nuclear is liked least and is perceived as most harmful to the environment.

The environmental implications of their energy sources is very important to consumers when assessing their opinions about electricity. Most consumers (82%) say that whether an energy source is harmful to the environment is a very important reason for liking or disliking an energy source. When compared to other reasons: 65% of consumers think that the price of electricity that comes from the different sources is very important while less than half (45%) think that whether the source is of foreign or domestic origin is very important.

## **2.4 Conservation Practices**

Considering the respondents basically voiced two concerns: high prices and environmental issues, it is interesting to look at their own behaviors in the way of energy conservation activities. Most homeowners have done something to conserve energy. The following table shows some of those activities:

**Table 4. Energy Conservation Activities**

<b>Activity</b>	<b>National Percent</b>	<b>New England Percent</b>	<b>California Percent</b>
Turned off unneeded lights and appliances.	94%	93%	93%
Added insulation to walls, ceilings, or the water heater.	72%	73%	71%
Replaced appliances with energy-efficient models.	72%	62%*	72%
Ran large appliances like the dishwasher at night when electricity demand is lower.	62%	68%	70%
Installed automatic set-back thermostat.	34%	29%	39%
Participated in an energy conservation program offered through your electric company or some other group.	25%	37%*	29%

\* Statistically significant difference when compared to general population

For most consumers (75%) saving money and/or lowering their electric bill was the primary reason for making conservation efforts. Fifty percent give reasons pertaining to the outside environment such as: to save scarce fuels/conserve energy (43%), to reduce air and water pollution caused by producing electricity (9%), and to help/protect the environment (2%).

### **3.0 Energy Deregulation**

With the onset of the deregulation of the electricity industry it is critically important for the industry and policy-makers to understand the customer’s view of this endeavor. In general, since the number of the pilot programs for competition is so limited, many people do not have firsthand knowledge or exposure to deregulation information. The following is a summary of findings about the public’s knowledge of, attitudes toward, and opinions about deregulation.

#### **3.1 Knowledge about deregulation**

•A majority of consumers (52%) have heard about the deregulation of electric utilities. This number is slightly higher for bill payers (54%) and is lower for non-bill payers (43%). There are differences in this knowledge across race as well; Fifty-five percent of whites have heard about deregulation whereas only 38% and 31% of African-Americans and Hispanics, respectively, have heard about it. Sixty-percent of consumers who describe their race as “Other” have heard about deregulation. The higher the level of education that consumers achieve, the more likely they are to have heard about deregulation (Less than high school graduate 36%, high school graduate 47%, some college + 60%). Finally, there is also a regional difference in people’s knowledge of deregulation; 64% of consumers in the East have heard about deregulation whereas only about half of consumers in the West(53%), Midwest (50%) and South (47%) have heard.

The highest level of knowledge about deregulation is in New England (66%) and it is similarly high in California (63%)

- The most likely information that consumers who have heard about the deregulation know is that they will have some choice in who their supplier will be (48%). About a third (30%) only know that deregulation is going to happen, but nothing else more. One in ten (10%) say they have heard deregulation will lower the price of electricity.
- For most consumers, major media have been the primary source for deregulation knowledge. When asked to say where they heard about deregulation, seven in ten first mention either television (35%) or the newspaper (35%). Few consumers (1%) cite their electric company as their source for deregulation knowledge.
- Since deregulation is in its early stages, with limited roll-out pilot programs, just 4% of those knowledgeable about deregulation (2% of the total population), say they have received mailings from companies who want to be their electricity supplier.
- Because numbers are so few, we can only make one general observation: Of the small number that say they have received mailings, an overwhelming majority say they are not considering changing their current electricity supplier.

### **3.2 General Opinions About Deregulation**

- Deregulation is not likely to change the service that electric companies supply to their customers, according to a plurality of consumers. Forty-six percent say that after deregulation, service will stay about the same. The remainder are split over whether their service will improve (25%) or decline (26%). African-American respondents are much more optimistic about deregulation; 42% think their service will improve while 36% say it will stay the same and only 20% say it will decline. Similar optimism appears for Hispanics and other minorities as well; 32% think their service will improve compared to only 22% of whites. In New England, 37% think their service will stay the same, and more optimistically, 34% think things will improve.
- A majority of consumers (57%) see no change in the reliability of their electric service.
- Although most Americans see no general change in their electricity service, they are divided when it comes to the impact of deregulation on the price they will pay for electricity. A fairly equal proportion believe the price they will pay will either increase (35%), decrease (33%), or stay about the same (31%). This even split decreases with age: of respondents 61 years of age and older, 45% think the price they pay will increase and only 17% think they will decrease. This split also differs based on education: consumers with a high school degree or less are less optimistic than those with some college education. The following is a chart with a breakdown of responses by age and education:

**Table 5: Perceptions of Price by Age and Education**

	Age				Education		
	18-30	31-44	45-60	61+	Less than H.S.	H.S. Grad	Some College +
Increase	30 %	28 %	41 %	45 %	45 %	40 %	29 %
Decrease	34 %	43 %	31 %	17 %	16 %	30 %	40 %
Stay same	35 %	28 %	27 %	36 %	35 %	29 %	31 %

•It is clear that consumers perceive that deregulation and the idea of choice will have an impact on the environment. Seven in ten consumers believe they would be able to affect the amount of pollution created by choosing electricity suppliers who use cleaner production methods.

•When creating information campaigns for consumers about deregulation and choice, results of this survey indicate that suppliers need to emphasize the reliability of their service, the price, and impact on the environment. Six in ten consumers say information about reliability would be very useful to them when making a choice about an electricity supplier. Price information would be very useful to a majority of consumers (51%). Similarly, information about the environmental impact would be very useful to nearly half of the consumers (49%). Least useful would be information about corporate location, since nearly four in ten (37%) say they would not find this information useful.

•More than two-thirds (68%) of consumers think the electricity of low income families should be guaranteed even though it may be costly. This support varies based on income; three-quarters of those who have a annual household income of less than \$20,000 support this idea. Further, 73% of consumers who make less than \$50,000 support this compared with 63% of consumers who make more than \$50,000 do. As income increases the likelihood of supporting helping low income families decreases but, the majority of consumers are still in support. •

#### **4.0 Conclusions**

It is clear from this survey that consumers are generally content with the current state of how they are supplied with electricity, though there are some areas of concern, namely environmental responsibility and price.

Although deregulation can address both of these concerns, most consumers believe it will have minimal impact on how they currently are supplied with power, though there is some disagreement, or even uncertainty about how deregulation will impact price. One challenge is to be able to inform consumers about price in a way that they can understand or to better educate them on things such as kilowatt hours.

As deregulation and choice move forward, electricity suppliers should design communication campaigns that emphasize the benefits of high-quality service, reliability, lower price due to competition, and a more responsible concern for the environment. These highlighted consumer benefits (backed up by real action) will only serve to help these companies that are part of this unique event in the history of U.S. energy policy.

## **5.0 Methodology**

A total of 1,307 interviews were conducted by Chilton Research Services. This study was a national random sample of people in the 48 contiguous United States aged 18 and over. Additionally, an over sample of random adults in New England was included, so that 162 people in New England were interviewed. One-hundred and twenty-five people were randomly interviewed that live in California. Telephone interviews were conducted September 9- 22. After the data were collected, the sample was balanced back to the census parameters for region, race, sex, age and education. The margin of error for a 95% confidence interval is  $\pm 3.0\%$ .

## **Appendix A**

The following pages contain the questionnaire used for the telephone interviews conducted by Chilton Research Services.

Final

Chilton Research Services #6690

Radnor, Pennsylvania 19089-0193 September 1997

National Council on Competition and the Electric Industry

## ELECTRICITY DEREGULATION TRACKING SURVEY

Hello, I'm \_\_\_\_\_ calling from Chilton Research Services on behalf of the National Council, a group responsible for regulating electric power utilities around the country. We are conducting a survey to find out how people like you feel about their electrical power service and the companies who supply them with electricity. Thinking of all the male/female adults 18 years of age and older, living in this household. . . .may I please speak to the one who last had a birthday? (IF NO MALE/FEMALE IN THE HOUSEHOLD, ASK: Then may I please speak to the female/male who last had a birthday

(IF NECESSARY:)

Any information you give will be anonymous. Your name is not recorded as part of the interview. After the interview, your name is deleted and will never be associated with your answers. Your cooperation is voluntary, but vital to our agency's needs.

01.First, are you the person or one of the people who regularly handles the household bills like the phone and electric bill?

208

Yes 1

No 2

DK/No opinion 8

NA/Refused 9

I'd like to ask about your current supplier of electricity.

04.Who is your current electric utility or electric company?

(INTERVIEWER NOTE: If difficulties, probe) That is, who sends you your electric bill?

INTERVIEWER NOTE: If the respondent gives the abbreviation-askthem for the full name; please enter both

209

VBA

DK/No opinion 88

NA/Refused 99

**\*\*AUTHOR NOTE: SCRAMBLE LIST\*\***

05.How satisfied are you with (READ ITEM): Are you very satisfied, somewhat satisfied, not too satisfied, or not at all satisfied? How satisfied would you say you are with:(READ NEXT ITEM):

Very satisfied 1

Somewhat satisfied 2

Not too satisfied 3

Not at all satisfied 4

DK/No opinion 8

NA/Refused 9

A. The price charged for your electricity -> \_210

B. The reliability of you electric company -> \_211

C. The service provided by your current electric company -> \_212

D. The environmental concern or sensitivity of your current electric company -> \_213

E. Your electric company in general -> \_214

10.How important is it to you that your electric company be environmentally responsible? Would that be : very important, somewhat important, not too important or not at all important

238

Very important 1

Somewhat important 2

Not too important 3

Not at all important 4

DK/No opinion 8

NA/Refused 9

**\*\*AUTHOR NOTE:SCRAMBLE LIST\*\***

11.Do you expect your electric company to care a lot, a little or not at all about (READ EACH ITEM):

Care a lot 1

A little 2

Not at all 3

DK/No opinion 8

NA/Refused 9

A. The amount of air pollution they create -> \_241

B. The amount of water pollution they create -> \_242

C. The amount of renewable resources such as hydro-power, solar and wind they use -> \_243

D. The amount of wildlife or wildlife habitat they may harm while making electricity -> \_244

E. The amount of nuclear waste they create -> \_245

F. Promoting energy conservation practices -> \_246

**\*\*AUTHOR NOTE: REPRES ITEMS IN Q.11 THAT THE RESPONDENT CARES A LOT ABOUT IN SAME ORDER\*\***

12.Which of these do you think your electric company should care most about?(READ ITEMS)

251

A. The amount of air pollution they create 1 B. The amount of water pollution they create 2

C. The amount of renewable resources such as hydro-power, solar and wind they use 3

D. The amount of wildlife or wildlife habitat

they may harm while making electricity 4

E. The amount of nuclear waste they create 5

F. Promoting energy conservation practices 6

DK/No opinion 8

NA/Refused 9

14. I'm going to read a list of different fuel and energy sources. After I read the list, I'd like you to tell me what energy source is most heavily used to produce electricity in your area. (READ LIST AND REPEAT LIST IF RESPONDENT REQUESTS). What's the next most heavily used? What's the third?

Solar 01

Coal 02

Oil 03

Natural Gas 04

Nuclear 05

Hydro-electric 06

Wind 07

Waste-to-energy 08

Wood or other bio-mass 09

Geo-thermal 10

Other(Specify)\_\_\_\_\_ LL

DK/No opinion 88

NA/Refused 99

First mention\_\_253-54 Second Mention\_255-56\_ Third Mention\_257-58

**\*\*AUTHOR NOTE:SCRAMBLE LIST\*\***

15.I'm going to read the same list of different types of fuel and I'd like you to tell me how much you like each type. On a scale from 1 to 5, where 5 means you like this fuel source very much and 1 means you do not like this fuel source at all, how much do you like (READ ITEMS).

Like very much 5

4

3

2

Do not like at all 1

DK/No opinion 8

NA/Refused 9

A. Solar -> \_261

B. Coal -> \_262

C. Oil -> \_263

D. Natural Gas -> \_264

E. Nuclear -> \_265

F. Hydro-electric -> \_266

G. Wind -> \_267

H. Waste-to-energy -> \_268

I. Wood or other bio-mass -> \_269

J. Geo-thermal -> \_270

**\*\*AUTHOR NOTE:SCRAMBLE LIST\*\***

16.I'm going to read a list of possible reasons for liking and disliking a certain energy source. For each, please tell me if it is a very important, somewhat important, not too important or not at all important reason to you for liking or disliking a certain energy source.

Very important 1

Somewhat important 2

Not too important 3

Not at all important 4

DK/No opinion 8

NA/Refused 9

A. The price of the electricity that comes from the different sources -> \_273

B. Whether the energy source is of domestic or foreign origin -> \_274

C. If using the energy source is harmful to the environment -> \_275

17. For the same list of fuels, I would like you to rate how harmful to the environment you think each type of fuel is. On a scale of 1 to 5 where 5 means not at all harmful to the environment and 1 means very harmful to the environment, how harmful do you think (READ ITEMS) is:

Not at all harmful to the environment 5

4

3

2

Very harmful to the environment 1

DK/No opinion 8

NA/Refused 9

A. Solar -> \_308

B. Coal -> \_309

C. Oil -> \_310

D. Natural Gas -> \_311

E. Nuclear -> \_312

F. Hydro-electric -> \_313

G. Wind -> \_314

H. Waste-to-energy -> \_315

I. Wood or other bio-mass -> \_316

J. Geo-thermal -> \_317

Now I'd like you to think about your own electricity use last month.

18. Do you rent or own the residence you live in?

321

Rent 1

Own 2 (SKIP TO Q.20)

Other 3

DK/No opinion 8

NA/Refused 9

19. Is the electricity bill included in your rent or do you pay it separately?

322

Included in rent 1 (SKIP TO Q.25)

Pay separately 2

DK/No opinion 8

NA/Refused 9

20. Are other services such as gas included in your electric bill?

323

Yes 1

No 2

DK/No opinion 8

NA/Refused 9

22. About how many Kilowatt hours of energy did you use during the month?

325-330

\_\_\_ \_\_\_ \_\_\_ \_\_\_ KWH

DK/No opinion 88888

NA/Refused 99999

**\*\*AUTHOR NOTE: IF Q.20=1, SHOW PROBE\*\***

23. About how much was your total electricity bill last month?

INTERVIEWER PROBE: DO NOT INCLUDE GAS IN BILL

331-334

\$ \_\_\_ \_\_\_ \_\_\_

DK/No opinion 8888

NA/Refused 9999

**\*\*AUTHOR NOTE: VERIFY RESPONSES OVER 10 CENTS\*\***

24. About how much were you charged per Kilowatt hour?

335-336

\_\_\_ \_\_\_ cents/KWH ROUND TO NEAREST CENT

More than \$1.00 00

DK/No opinion 88

NA/Refused 99

**\*\*AUTHOR NOTE: SCRAMBLE ITEMS. IF Q.18=1 SKIP TO Q.26.1\*\***

25. Have ever tried any of the following as a way to reduce your electricity use around the house? Have you ever (READ ITEMS)

Yes 1

No 2

DK/No opinion D

NA/Refused R

A. Added insulation to walls, ceilings or the water

heater -> \_337

B. Replaced appliances with energy-efficient models -> \_338

C. Installed automatic set-back thermostat -> \_339

D. Turned off unneeded lights and appliances -> \_340

E. Ran large appliances like the dishwasher at

night when electricity demand is lower -> \_341

F. Participated in an energy conservation program offered through

your electric company or some other group -> \_342

**\*\*AUTHOR NOTE: ASK IF Q.25F = 1, OTHERWISE SKIP TO Q.26\*\***

25.1 Was that your electric company, community group, or some other group?

343

Electric Company 1

Community Group 2

Other 3

DK/No Opinion 8

NA/Refused 9

**\*\*AUTHOR NOTE: IF ANSWERED NO TO ALL QUESTIONS IN Q.25, SKIP TO 28.  
DO NOT READ ITEMS, ALLOW 3 RESPONSES\*\***

26. What was your main reason for doing these things? (DO NOT READ)

344-45, 346-47, 348-49

VBA = 277

To save money/Lower Electric Bill 01

To reduce air and water pollution 02

caused by producing electricity

To save scarce fuels/Conserve Energy 03

Other(Specify)\_\_\_\_\_ LL

DK/No opinion 88

NA/Refused 99

**\*\*AUTHOR NOTE:SCRAMBLE ITEMS\*\***

26.1 Now, I'm going to read a few statements and for each one I'd like you to tell me if you agree or disagree with it. (GET ANSWER, THEN ASK:) Is that agree/disagree strongly or somewhat?

Strongly agree 1

Somewhat agree 2

Somewhat disagree 3

Strongly disagree 4

DK/No opinion 8

NA/Refused 9

A. I think the prices we pay for electricity are too high -> \_436

B. Preserving the natural environment is important

even if it costs more -> \_437

C. I think the concern about global warming is exaggerated -> \_438

D. I believe the government has an important role in protecting the environment -> \_439

E. I think the electricity service of low income families

should be guaranteed even though it may be costly -> \_440

F. The total amount of pollution created during the creation of

electricity is small when compared to other sources of pollution -> \_441

G. I think the government should regulate the electricity industry -> \_442

Now I'd like to ask you about some possible changes in the electricity generation industry.

28. Have you heard anything about the deregulation of electric utilities or the possibility that some people may choose their electric company? 351

Yes 1

No 2 (SKIP TO Q.37)

DK/No opinion 8 (SKIP TO Q.37)

NA/Refused 9 (SKIP TO Q.37)

29. What have you heard about electricity deregulation?

(PROBE: HOW DOES IT WORK?)

352

VBA

CODES FOR CODING:

Our electric company will be deregulated 01

We will be able to choose our supplier 02

Prices will go down 03

Prices will go down for large customers but

not for small users 04

Prices will go up 05

It will be like telephone deregulation 06

I will get a lot of calls 07

Electric companies will get bailed out 08

Electric companies will have to shut plants and/or  
layoff workers 09

DK/No opinion 88

NA/Refused 99

**\*\*AUTHOR NOTE: ALLOW UP TO 3 RESPONSES\*\***

30. Where did you hear about electricity deregulation?

(INTERVIEWER NOTE: IF "MAGAZINE," PROBE: WAS THAT PART OF A NEWS  
STORY OR ADVERTISEMENT?) 354-359

Television 01

Radio 02

Newspaper 03

Advertising or solicitation 04

Neighbor or friend 05

Magazine 06

Other (Specify) \_\_\_\_\_ LL

DK/No opinion 88

NA/Refused 99

31. Have you received any mailings or offers from companies who want to be your  
electric company? 360

Yes 1

No 2(SKIP TO Q.37)

DK/No opinion 8(SKIP TO Q.37)

NA/Refused 9(SKIP TO Q.37)

**\*\*AUTHOR NOTE: VERIFY RESPONSES OVER 10\*\***

33.I'd like you to think about the advertising, mailings and offers you received from companies who wanted to sell you electricity. About how many companies do you remember seeing advertising from or receiving flyers from in the mail or receiving other types of solicitations?

368-369

— —

DK/No opinion 88

NA/Refused 99

33.1Are you considering changing who supplies your electricity?

372

Yes 1

No 2

DK/No opinion 8

NA/Refused 9

33.2Have you recently changed who supplies your electricity?

373

Yes 1

No 2

DK/No opinion 8

NA/Refused 9

**\*\*AUTHOR NOTE: IF Q. 33.1 AND Q. 33.2 = 2,8,9, SKIP TO Q.36\*\***

34. About how many companies did you or would you consider when making your final choice of who supplies your electricity?

370-371

— —

DK/No opinion 88

NA/Refused 99

36. Did you find comparing the offers from different companies was (READ ITEMS)

421

Very easy 1

Somewhat easy 2

Somewhat difficult 3

Very difficult 4

(VOL) Haven't compared companies yet 5

DK/No opinion 8

NA/Refused 9

37. Under deregulation all existing electric utilities plus many new companies will be allowed to compete to serve you. Utility regulators will no longer say how each company should produce power or how much they can charge. Under deregulation . . .

Do you think that your electricity service would . . . (READ ITEMS)

422

Improve 1

Get worse 2

Stay about the same 3

DK/No opinion 8

NA/Refused 9

38. Do you think the reliability of your electricity service would . . (READ ITEMS)

423

Improve 1

Get worse 2

Stay about the same 3

DK/No opinion 8

NA/Refused 9

39. Do you think the price you would pay for electricity will . . (READ ITEMS)

424

Increase 1

Decrease 2

Stay about the same 3

DK/No opinion 8

NA/Refused 9

40. Do you think consumers would be able to affect the amount of pollution created by choosing electric suppliers who use cleaner production methods?

425

Yes 1

No 2

DK/No opinion 8

NA/Refused 9

41. How useful would you find the following information when making a decision about choosing an electric company. Would you say very useful, somewhat useful, not too useful, not useful at all?

Very useful 1

Somewhat useful 2

Not too useful 3

Not useful at all 4

(VOL)Never received information 5

DK/No opinion 8

NA/Refused 9

A. Price -> \_426

B. Reliability -> \_427

C. Environmental Information -> \_428

D. Contract terms -> \_429

E. Consumer complaint history. -> \_430

F. Years in business -> \_431

G. Corporate location -> \_432

41.1Is there anything else you would find useful?

434

Yes 1-GO TO VBA SPACE TO ENTER RESPONSE

No 2

DK/No opinion 8

NA/Refused 9

**\*\*AUTHOR NOTE: ASK ONLY OF CALIFORNIA RESIDENTS, OTHERWISE SKIP TO Q.43\*\***

42.Have you ever heard of the Renewable Energy Branding Project's Green-e Program?

463

Yes 1

No 2(SKIP TO Q.43)

DK/No opinion 8(SKIP TO Q.43)

NA/Refused 9(SKIP TO Q.43)

42.1 Would you be more likely to purchase electricity from a company certified by the Green-e program than a company that is not?

464

Yes 1

No 2

DK/No opinion 8

NA/Refused 9

And finally, I have a few questions for statistical purposes.

43. How many people live in your household, including you and any children?

446-447

— —

DK/No opinion 88

NA/Refused 99

44. In what year were you born?

115-18

— — — — ?

DK/No opinion 8888

NA/Refused 9999

AGE RECODE 448-451

AGE VERIFICATION 452-453

45. What was the last grade of school you completed?

456

8th grade or less 1

Some high school 2

Graduated high school 3

Some college 4(ASK IF SCHOOL WAS A TECHNICAL SCHOOL; IF IT WAS ENTER 3 FOR HIGH SCHOOL)

Graduated College 5

Post-graduate 6

DK/No opinion 8

NA/Refused 9

45.1 Are you of Hispanic origin or background?

(IF "YES," ASK:) Are you White Hispanic or Black Hispanic?

(IF "NO," ASK:) are you white, black, or some other race?

461

White 1

Black 2

White Hispanic 3

Black Hispanic 4

Hispanic(no race given) 5

Other Race 6

NA/Refused 9

46.If you added together the yearly incomes, before taxes, of all the members of your household for last year, 1996, would the total be: (READ LIST)

457

Less than \$30,000, or 1

\$30,000 or more 2(SKIP TO Q.46.2)

(DO NOT READ)NA/Refused 9(SKIP TO Q.47)

46.1 Would that be: (READ LIST)

458

Under \$8,000 1(SKIP TO Q.47)

\$8,000 but less than \$12,000 2(SKIP TO Q.47)

\$12,000 but less than \$20,000 3(SKIP TO Q.47)

\$20,000 but less than \$30,000 4(SKIP TO Q.47)

(DO NOT READ)NA/Refused 9(SKIP TO Q.47)

46.2 Would that be: (READ LIST)

459

\$30,000 but less than \$50,000 1

\$50,000 but less than \$75,000 2

Or \$75,000 or more 3

(DO NOT READ)NA/Refused 9

47. Do you belong to or have you recently made a donation to any environmental organization?

460

Yes 1

No 2

DK/No opinion 8

NA/Refused 9

THANK RESPONDENT.

RESPONDENT'S SEX: 141

Male 1

Female 2

## Appendix B

The following is a chart showing the regional breakdown of the United States in the groups discussed.

Figure 1.  
**Map of the United States, Showing Census Divisions and Regions**



Source: U.S. Bureau of the Census

