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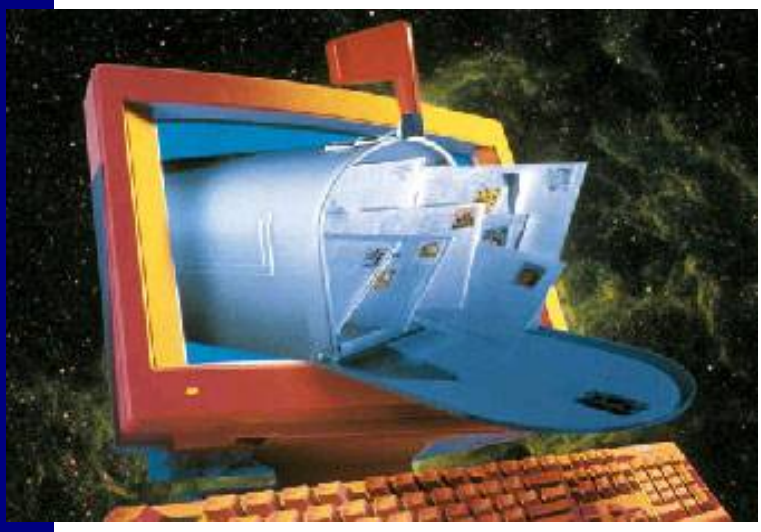
The Impact of Rising Energy Prices on Low-Income Consumers



NRRI 04-14

THE IMPACT OF RISING ENERGY PRICES ON LOW-INCOME CONSUMERS

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November 2004

This report was prepared by the National Regulatory Research Institute (NRRI). Funding was provided by the member commissions of the National Association of Regulatory Utility Commissioners (NARUC). The opinions expressed are the author's and do not necessarily reflect the views, opinions or policies of the NRRI, the NARUC or any NARUC-member commission.

EXECUTIVE SUMMARY

The problems associated with utility disconnections are everyone's problems. For low-income consumers disconnection may culminate in use of unsafe heating devices, health and safety risks and even homelessness. An increase in call center activity as a result of high energy prices can put significant strain on the function of call centers at both utilities and state public utility commissions. Utilities bear significant costs associated with credit and collection activities. Moreover, the soaring amount of revenue owed on residential accounts must either be passed on to shareholders as bad-debt write-off or kept in arrearage accounts and passed on to ratepayers in the form of rate increases; this further compounds the energy burdens facing all consumers.

Exceedingly volatile natural gas, electricity and fuel oil prices in recent years have significantly increased the energy burden facing consumers, particularly low-income consumers. Impacts include the following:

- Many low-income households do not have sufficient income to pay for vital energy services along with other basic necessities of life and must choose between paying energy bills and omitting or deferring payment for one or more necessities, such as food, medicine or rent, or assuming unmanageable levels of debt
- The number of households receiving Low-Income Home Energy Assistance Program (LIHEAP) increased by about 376,000 between 2002 and 2003 and is projected to increase by an additional 286,000 in FY 2004
- Over the time period of Apr. 1, 2001, to Mar. 31, 2002, electric and natural gas companies experienced high levels of customer arrearages leading to increased service termination for nonpayment and increased revenue loss by utilities[1]

[1] See Francine Sevel and Mitch Miller, *NARUC Staff Subcommittee on Consumer Affairs Low-Income Energy Policy Survey*, Columbus, Ohio, 2003). This information will be discussed in detail later in this report.

This report presents a brief overview of the problem of poverty in the United States and provides statistics and sheds light on the problems faced by the working poor. Although somewhat dire, information such as this helps us to better understand the economic choices facing many low-income consumers—particularly the decision not to pay their energy bills. The report also provides a brief overview of low-income assistance programs, including the status of LIHEAP funding, the results of the first national survey of LIHEAP recipients, as well as other federal and state initiatives.

Next the report discusses the importance of collecting national data regarding the inability to pay energy bills and focuses on research conducted by the NRRI and the NARUC Staff Subcommittee on Consumer Affairs Low-Income Work Group. The report compares low-income consumers responses to the responses of all others to select questions within the NRRI Consumer Utility Benchmark Survey conducted in 2003. Here, 18,793 Internet users offered opinions on their utility service quality.

The report ends with conclusions and performance measures that commissions might consider to help low-income consumers mitigate skyrocketing energy prices and prevent utility disconnections.

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FOREWORD

Exceedingly volatile natural gas, electricity and fuel oil prices in recent years have significantly increased the energy burden facing low-income consumers and in turn increased the number of utility disconnections for nonpayment. The problem of utility disconnections is a large-scale societal problem that impacts many stakeholder groups including low-income consumers, social service and government agencies, utilities and state public utility commissions, as well as other consumer advocacy organizations. Hopefully, this report will raise awareness of the complexity of the issues associated with preventing utility disconnections. The report also discusses the importance of collecting national data regarding the inability to pay energy bills.

ACKNOWELDGEMENTS

The author would like to express her appreciation to the many members of the NARUC Consumer Affairs Committee, the NARUC Staff Subcommittee on Consumer Affairs and to her colleagues on the National Low-Income Energy Consortium Board of Directors who have generously shared their insights and expertise regarding factors that contribute to utility disconnections and the complexity of the issues associated with the inability of low-income consumers to pay their energy bills. The author extends her appreciation to Dr. Ray Lawton, NRRI Director, and Dr. Vivian Witkind Davis, NRRI Associate Director, for their support and insightful comments. Special acknowledgement is also extended to Carmell Brown, NRRI Report Production Manger, for her excellent assistance.

CHAPTER 1

INTRODUCTION

The problems associated with utility disconnections are everyone's problem. For low-income consumers disconnection may culminate in use of unsafe heating devices, health and safety risks and even homelessness.[2] Social service agencies bear the costs of providing alternatives to disconnection and, in many cases, helping to "pick up the pieces" when these alternatives fail. An increase in call center activity as a result of high energy prices can put significant strain on the function of call centers at both utilities and state public utility commissions. Utilities bear significant costs associated with credit and collection activities.[3] The soaring amount of revenue owed on residential accounts must either be passed on to shareholders as bad-debt write-off or kept in arrearage accounts and passed on to ratepayers in the form of rate increases; this further compounds the energy burdens facing all consumers.

Exceedingly volatile natural gas, electricity and fuel oil prices in recent years have significantly increased the energy burden facing consumers. Impacts on low-income consumers include the following:

- Many low-income households do not have sufficient income to pay for vital energy services along with other basic necessities of life and must choose between paying energy bills and omitting or deferring payment for one or more necessities, such as food, medicine or rent, or assuming unmanageable levels of debt.
- The number of households receiving Low-Income Home Energy Assistance Program (LIHEAP) increased by about 376,000 between 2002 and 2003 and is projected to increase by an additional 286,000 in FY 2004.

[2] The consequences will be discussed in depth below.

[3] John Howat, Jerry McKim, Charlie Harak and Olivia Wein, *Tracking the Need: Building the Case for Low-Income Energy Assistance through Trend Data on Disconnection and Arrearages*, National Energy Directors' Association, May 2004, available at: http://www.neada.org/.

- Over the time period of Apr. 1, 2001, to Mar. 31, 2002, electric and natural gas companies experienced high levels of customer arrearages leading to increased service termination for nonpayment and increased revenue loss by utilities.[4]

According to data on arrearages and shut-offs collected by National Energy Agency Directors' Association (NEADA), as of May 14, 2001, 19 states and the District of Columbia reported arrearages totaling almost $910 million. As a result of these arrearages nearly 4.3 million households were at risk of having their service disconnected at the end of the 2000-2001 winter heating season.[5] The number of overdue and disconnected households remained high in the following winter seasons. According to the National Consumer Law Center, during winter 2002-3 the number of consumers overdue on their bills in Pennsylvania increased 17 percent from 2001, and at the end of the season utilities terminated service to 22,750 households in the state.[6] Similarly, as of March 2003, Iowa had 24,000 LIHEAP households with past due accounts totaling $8 million in arrearages, and the number of disconnected households was over 6,000.[7]

The fall of 2003 witnessed both an anticipated rise in winter heating prices and increased concerns regarding the plight of the low-income consumer.[8] As an example, according to Piedmont Natural Gas, the parent company of Nashville-based Nashville Gas, Tennessee residents who relied on natural gas were expected to see a 10 to 20

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[4] See Francine Sevel and Mitch Miller, *NARUC Staff Subcommittee on Consumer Affairs Low-Income Energy Policy Survey*, Columbus, Ohio, 2003). This information will be discussed in detail below.

[5] National Energy Agency Directors' Association (NEADA), *State-by-State Low-Income Home Energy Assistance Program Survey Responses*, June 4, 2001. http://www.neada.org/communications/Surveys/SurveyResp_May14_2001.htm.

[6] National Consumer Law Center (NCLC), *Testimony to the US House of Representatives Committee on Appropriations, RE: FY2004 Appropriations for LIHEAP,* May 2003.

[7] Ibid.

[8] For information on state public utility commission responses to high energy prices please see: *Responses on High Gas Prices: NARUC Public Information Officers' Survey, July 2003* available at: http://www.nrri.ohio-state.edu/.

percent spike in their winter heating costs.[9] A comparison of the prices charged by Michigan's four largest natural gas utilities indicated that price increases from July 2002 to July 2003 ranged from 8 to 14 percent. When other distribution charges were factored in, it was estimated that residential customers could see an average increase over the winter months ranging from $9.00 to $29.00 monthly—assuming normal weather.[10]

Similarly, according to Washington Gas, the commodity cost plus the cost of transporting gas through Washington Gas' pipeline rose from 54.53 cents per therm in December 2002 to 71.36 cents in December 2003. For January 2004, Washington Gas projected the cost would be 78.05 cents.[11]

As an example, this year Philadelphia Gas Works requested an overall rate increase of $31.4 million per year to recover purchased gas costs and to levy an $80 per year surcharge on utility bills to defray the costs of those who don't pay their bills.[12] The fee was designed to recover any uncollectible balance over $55.7 million.

In Colorado, as early as December of 2003 a record number of Xcel energy customers were already behind in their heating bills. According to statistics released by the utility, a 73 percent rate increase and thousands of job losses over the last year put 256,865 customers behind for 30 days or more as of Nov. 30, 2003 (customers 45 days or more in arrears face potential disconnection). Xcel disconnected heat to 38,855 customers from Jan. 1 through Nov. 30 of 2003. The number of consumers eligible for heating assistance surpassed the amount of available funding: Twenty-two percent of Colorado customers were eligible for energy assistance as of December 2003.[13]

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[9] Tennessee Regulatory Authority, "TRA Hosts Natural Gas Symposium," Press Release, Aug. 21, 2003.
[10] *Consumer Alert,* as downloaded from the Michigan Public Service Commission website: http://www.michigan.gov/mpsc.

[11] Caroline E. Mayer, "The Cost of Keeping Warm: Weather Threatens to Push Heating Bills to New Heights," *The Washington Post*, Jan. 17, 2004.
[12] See: http://puc.paonline.com/press_releases/Press_releases.asp?View=PressRelease&PR_ID=1163 andhttp://puc.paonline.com/press_releases/Press_Releases.asp?UtilityCode=GA&UtilityName=Gas&PR_ID=1199&View=PressRelease.

[13] "Residents Falling Behind on Heating Bills with True Winter Looming," *The Associated Press State and Local Wire*, Dec. 5, 2003.

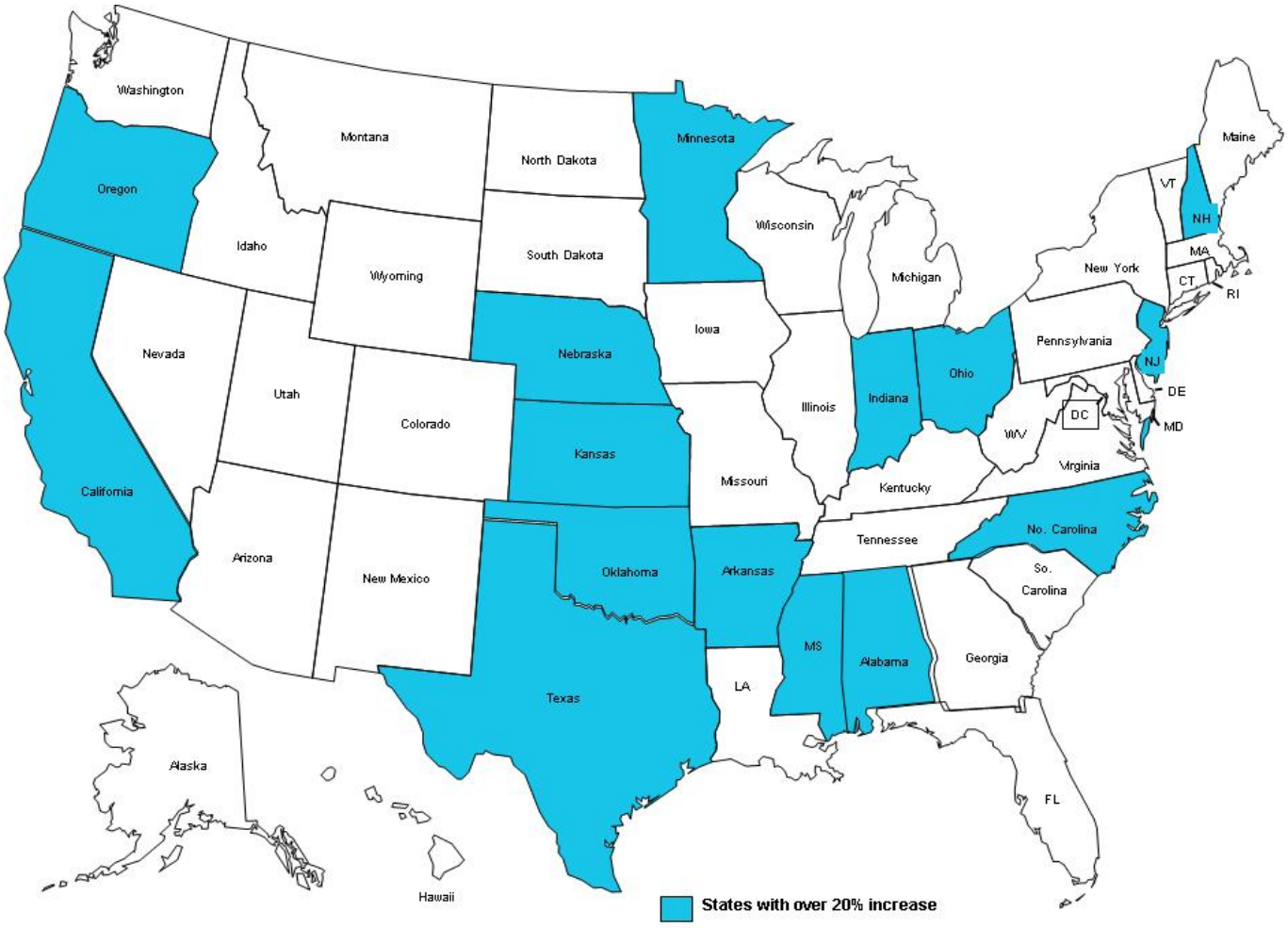

Fig. 1. States with over 20 percent increase in the number of households receiving LIHEAP since 2002.

Source: Author's construct based on data from NEADA Press Release, "States Report that Low-Income Home Energy Assistance Programs Rapidly Increase Adding Almost 661,000 New Families," Mar. 10, 2004.

The number of households receiving LIHEAP increased by about 376,000 between 2002 and 2003 and was projected to increase by an additional 286,000 in FY 2004.[14] Sixteen states reported increases of more than 20 percent since 2002: Alabama, Arkansas, California, Indiana, Kansas, Maryland, Minnesota, Mississippi,

[14] NEADA Press Release, "States Report that Low-Income Home Energy Assistance Programs Rapidly Increase Adding Almost 661,000 New Families," Mar. 10, 2004 available at: http://www.neada.org/comm/press/pr040310.pdf.

Nebraska, New Hampshire, New Jersey, North Carolina, Ohio, Oklahoma, Oregon and Texas.[15]

Examples of the severity of the problem include the following:[16]

- In Philadelphia, where the cut-off moratorium expires on Mar. 31, 2004, PEPCO Energy mailed out termination notices to 68,000 residential accounts that were seriously delinquent with instructions to pay past due balances or risk loss of service.
- Philadelphia Gas Works sent termination notices to 130,000 customers and is implementing an aggressive collection program, which will include digging up gas lines on the street and shutting them off in the cases where customers refuse the utility entry into their homes.[17]

In October 2003 NEADA conducted a national survey of choices made by LIHEAP recipient households when they cannot afford their energy bills.[18] Findings of the survey speak to the fact that high energy bills have the capability of creating long-term impacts on the physical and emotional health, safety and economic well-being of LIHEAP families. Impacts on health included going without food, medicine, medical or dental care and illness caused by the inability to combat cold or hot temperature homes. Impacts on shelter included utility disconnections, homelessness, eviction, missed rent or mortgage payments and having to move in with others. Specific impacts on health and safety will be discussed later in the report and include the following:

- 22 percent went without food for at least one day
- 38 percent went without medical or dental care
- 9 percent reported moving in with family or friends
- 4 percent were evicted

[15] A state-by-state breakdown of the survey results is available at: www.neada.org.

[16] Ibid.

[17] See: http://puc.paonline.com/press_releases/Press_releases.asp?View=PressRelease&PR_ID=1163.

[18] See NEADA, *National Energy Assistance Survey Report*, April 2004, the report is available at: http://www.neada.org/comm/surveys/NEADA_Survey_2004.pdf.

- 4 percent were homeless as a result of being evicted or being unable to pay rent, heat, etc.

The problem of soaring energy prices is a salient issue for regulators, utilities, consumers and consumer advocacy organizations. Although there is always the hope of a more stable market, projections of the Energy Information Administration (EIA) do not indicate any short-term relief:[19]

> Despite normal-looking natural gas storage injection and storage level patterns so far this year, natural gas spot prices (composites for producing area hubs) are likely to average about $6.20 per mcf in 2004, an increase of about 13 percent from 2003. Spot prices started out averaging about $5.50 per mcf in the first quarter of this year. Even though inventories of natural gas appear normal, strong demand coupled with high petroleum prices has lifted the ceiling for natural gas prices considerably. Spot gas prices have averaged over $6 since the beginning of May.

The "roller coaster" behavior of natural gas prices has led to heightened stress for all stakeholders.[20] Call centers at both state public utility commissions and utilities have witnessed increased traffic due to concerns over high gas prices and issues associated with the inability of consumers to pay their bills. Disconnection data, presented later in this report, indicates that it has become increasingly difficult for many low-income consumers to pay their bills. For consumers in other income brackets, it has become increasingly difficult to budget for their energy bills. Moreover, the problem is not a stranger to other customer classes. Some large, gas-intensive industrial customers have had to close their doors.[21] When any customer class fails to pay their bills, utilities—and in turn shareholders or ratepayers--must bear the costs associated with collections, disconnections and lost revenue.

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[19] EIA, "Short-Term Energy Outlook—June 2004," released June 8, 2004, available at: http://www.eia.doe.gov/emeu/steo/pub/contents.html.

[20] The NARUC Natural Gas Task Force, *Natural Gas Information "Toolkit*," November 2003.

[21] The ammonia and fertilizer industries have been especially burdened by high gas prices. According to one study, since mid-2000 eleven ammonia plants, representing 21 percent of US capacity, have been forced to close as cited in The NARUC Natural Gas Task Force, *Natural Gas Information "Toolkit*," November 2003.

Regulators prefer that natural gas prices are affordable for all customers and at the same time allow the utilities to remain economically viable while bearing soaring costs. Gas utilities have their own worries; uncollected consumer debt quickly translates into reduced profits.[22] The fear of utility bankruptcy is no stranger to both commissions and the public. The problem is further complicated by the impact that it has on the electric industry:

> Aggravating the effect of high gas prices is the recent phenomenon of the electricity industry becoming more reliant on natural gas for generation. For state public utility commissions, high gas prices mean not only higher gas bills but also higher electricity bills.[23] In fact, in most regions of the country, gas-fired electricity generation has become the marginal source of power, in the process increasingly acting as a primary determinant of market-based wholesale electricity prices. Gas-fired generation has also increasingly served base-load demand for electricity, affecting both peak and off-peak electricity prices.[24]

Consumer advocates agree that there are often misconceptions regarding the ability and willingness of low-income consumers to both pay and reduce their energy bills. Misconceptions are harmful for all stakeholders as they may lead to use of inappropriate and ineffective mitigation techniques and collection strategies. A study by Wisconsin Public Service Corporation (WPSC), a subsidiary of Wisconsin Public Service, tested the assumption that most delinquent customers had money, knew exactly what they were doing and were financially able to pay their bill.[25] Results of their research indicated that only 12 percent of consumers fell into this category and paid almost immediately when presented with a disconnection notice. The remaining 88 percent had very little or no resources with which to respond to disconnection notices. Furthermore, 19 percent (of the 88 percent) viewed themselves as helpless to cope with

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[22] For information on uncollected consumer debt see: Francine Sevel and Mitch Miller, *NARUC Staff Subcommittee on Consumer Affairs Low-Income Energy Policy Survey*, Columbus, Ohio, 2003).

[23] See NARUC Staff Subcommittee on Electricity, *Gas and Electricity Interdependence: The Current Situation and Intermediate and Long-Term Solutions*, July 2003. The report can be found at www.naruc.org/interdependence.pdf.

[24] The NARUC Natural Gas Task Force, *Natural Gas Information "Toolkit*," November 2003.

[25] Ron Grosse, *Win-Win Alternatives for Credit and Collections*, Wisconsin Public Service Corporation, 1997.

the situation. From an operational standpoint this information was very important as the company's credit and collection policies were geared to the 12 percent who could easily respond to the disconnection notices. Yet these policies were very inadequate to help company employees address the problems of the other 88 percent who could not pay their bills. Threats of disconnection and disconnection of other accounts did not witness an increase in the collection of arrears. Results of the study indicated that the connection between the ability to disconnect and collecting revenue was either much weaker than previously assumed or simply did not exit.

Another misconception revolves around the belief that low-income consumers do not practice energy saving measures.[26] However, results of the first national survey of choices made by LIHEAP-recipients households when they cannot afford their energy bills indicates that almost all LIHEAP recipients took constructive actions to lower their energy bills:[27]

- 44 percent put plastic on their windows
- 76 percent turned down the heat when they went to bed
- 83 percent kept shades and curtains closed during the daytime in the summer
- 78 percent used fans and opened windows
- 65 percent washed clothes in cold water
- 44 percent used compact fluorescent light bulbs

Although there is no question that these "techniques" do offer considerable solace, in many cases the problem is far more complex—often requiring immediate and

[26] There are many excellent sources of information regarding consumer strategies to mitigate high energy bills. Links to state information for consumers are found at: http://www.nrri.ohio-state.edu/members/consumers./. Useful energy conservation and energy efficiency information websites include: (1) DOE's Energy Program: www.energystar.gov, (2) DOE's Energy Smart Schools: www.energysmartschools.gov, (3) DOE's Energy Savers Tips: www.eere.energy.gov/consumerinfo/energy_savers/, (4) Alliance to Save Energy: www.ase.org, (5) DOE's Weatherization Assistance Program: www.eere.energy.gov/weatherization_assistance, (6) DOE's Energy Efficiency and Renewable Energy Clearinghouse (EREC): www.eren.doe.gov/erec/factsheets, (7) National Association of State Energy Officials (NASEO): www.naseo.org, (8) ACEEE Report on Energy Efficiency/Gas: www.aceee.org/energy/efnatgas-study.htm.

[27] See NEADA, *National Energy Assistance Survey Report,* April 2004, the report is available at: http://www.neada.org/comm/surveys/NEADA_Survey_2004.pdf.

urgent financial assistance.[28] This problem is further complicated by the fact that high and volatile energy prices can impact the economy and increase unemployment among low-income consumers. In order to understand the factors associated with the inability to pay utility bills, it is important to understand the issues surrounding poverty in the United States.

This report presents an overview of the problem of poverty in the United States and provides statistics that sheds light on the problems faced by the working and nonworking poor. Information such as this helps us to better understand the economic choices facing many low-income consumers—particularly the decision not to pay their energy bills. It also helps us to understand the complexity of the issues associated with alleviating the problems associated with utility disconnections.

The report also provides a brief overview of low-income assistance programs, including the status of LIHEAP funding, the results of the first national survey of LIHEAP recipients; the federal weatherization program; initiatives of the National Fuel Fund Network; state initiatives, including state-mandated assistance programs, and issues associated with state public commission do-not-disconnect rules. Next the report discusses the importance of collecting national data regarding the inability to pay energy bills and focuses on research conducted by the NRRI and the NARUC Staff Subcommittee on Consumer Affairs Low-Income Work Group.

Lastly, the report compares low-income consumers responses to the responses of all others to select questions within the NRRI Consumer Utility Benchmark Survey (CUBS) conducted in 2003. Here, 18,793 Internet users offered opinions on their utility service quality. Specific issues addressed in this report include the following:

- Perceptions of electric service price: low-income consumers vs. all others
- Perceptions of natural gas service price: low-income consumers vs. all others
- Energy supplier switching patterns of low income consumers vs. all others
- Impact of competition on perceptions of electric service quality: low-income consumers vs. all others

[28] On average, weatherization reduces heating bills by 32 percent and overall energy bills by $200 to $250 per year.

- Impact of competition on perceptions of natural gas service quality: low-income consumers vs. all others
- Impact of competition on perceptions of electric service price: low-income consumers vs. all others
- Impact of competition on perceptions of natural gas service price: low-income consumers vs., all others

The report ends with conclusions and performance measures that commissions might consider to help low-income consumers mitigate skyrocketing energy prices and prevent utility disconnections. These performance indicators are designed as a template for consumer affairs departments which are developing or reviewing their market monitoring activities, as opposed to a “one-size-fits all” approach. They are provided not as prescriptive recommendations but as catalysts for discussion.

CHAPTER 2

THE PLIGHT OF THE LOW-INCOME CONSUMER

Poverty in the United States

The problem of utility nonpayment does not exist in a vacuum. In order to understand the factors associated with the inability to pay utility bills, it is important to understand the issues surrounding poverty in the United States. As, Linda F. Alwitt and Thomas D. Donley point out in their book, *The Low-Income Consumer*, "in order to appreciate the problems of poor consumers in the marketplace, we must place a face on poor people. Public perceptions of the poverty population are frequently inaccurate, and these misconceptions can lead to poor marketing decisions and public policy."[29] Misconceptions can also lead to use of ineffective collection techniques. The following statistics from the US Census Bureau report, Income, Poverty and Health Insurance Coverage in the United States: 2003 shed light on the problem[30].

- The official poverty rate in 2003 was 12.5 percent, up from 12.1 percent in 2002.
- In 2003, 35.9 million people were in poverty, up 1.3 million from 2002.
- Poverty rates, remained unchanged for Hispanics, non-Hispanic Whites and Blacks, although it rose for Whites and Asians.[31]
- For children under 18 years old, both the poverty rate and the number in poverty rose between 2002 and 2003, from 16.7 percent to 17.6 percent, and

[29] Linda F. Alwitt and Thomas D. Donley, *The Low-Income Consumer* (Thousand Oaks, CA: Sage Publications, 1996), 47.

[30] Carmen DeNavas-Walt, Bernadette D. Proctor and Robert J. Mills, *Income Poverty and Health Insurance Coverage in the United States: 2003* as downloaded from http://www.census.gov/hhes/www/income03.html. The report is based on information collected in the 2004 Annual Social and Economic Supplement (AESC) to the Current Population Survey (CPS) conducted by the U.S. Census Bureau.

[31] Federal surveys now ask people to report one or more races. Therefore, two ways of defining a group such as Asian are possible. The first includes those who reported Asian and no other race; the second includes everyone who reported Asian regardless of whether they also reported another race. Data using both concepts are presented in the census report. In this report, "non-Hispanic Whites" refers to people who are not Hispanic who reported only White as their race.

> from 12.1 million to 12.9 million, respectively. The poverty rate of children under 18 remained higher than that of 18-to 64 year olds and that of seniors aged 65 and over (10.8 percent and 10.2 percent, respectively, both unchanged from 2002).

In 2003, the poverty rate and the number in poverty for related children under six years old living in families increased from 18.5 percent and 4.3 million in 2002 to 19.8 percent and 4.7 million in 2003. Of related children under six years old living in families with female head of households (with no husband present) 52.9 percent were in poverty, over five times the rate of their counterparts in married-couple families (9.6 percent).

The Working Poor: Who Are They?

When discussing the economic problems of low-income consumers it is important to have an understanding of both how they arrived in poverty and the factors associated with their inability to rise above the poverty level. This information is vital for an understanding of the decisions that they make when confronted with choices regarding which bills to pay.

Although welfare reform has helped to focus attention on the issue of moving families from public assistance to employment, only recently has the discussion begun to focus on whether available jobs provide sufficient income to support a family and the economic challenges facing many working families. According to Mar. 2002 statistics from the US Department of Labor, the working poor are defined as: individuals who spent at least 27 weeks in the labor force (working or looking for work), but whose incomes fell below the official poverty level.[32] The following statistics provide insights into the magnitude of the problem:[33]

> In 2000, 31 million people, or 11.3 percent of the population lived at or below the official poverty level—1.1 million fewer than in 1999. While

[32]US Department of Labor, Bureau of Labor Statistics, A Profile of the Working Poor 2000, March 2002, as downloaded from: http://www.bls.gov/cps/cpswp2000.htm, 1.

[33] Ibid.

> the bulk of these individuals were children and adults who did not participate in the labor force, about 6.4 million were classified as the "working poor." This was 445,000 fewer than in 1999, continuing a seven-year downtrend.

The report, *Making Ends Meet: How Much Does It Cost to Raise a Family in California,* describes the struggles that many Californians face when trying to make ends meet.[34] Here the authors, as do many others, contend that the federal poverty level (FPL) typically used by policymakers as the benchmark to judge a families' economic well-being is really an obsolete measure that fails to take into account the reality of modern families. As an example, the FPL fails to take into account the cost of child care in determining a family's basic needs or the high cost of living in some states, such as California. In order to achieve a modest standard of living, this report estimates that:

- A family with two working parents needs an annual income of $58,269, equivalent to both parents working full time for an hourly wage of $14.01[35]
- A two-parent family with one employed parent needs an annual income of $40,848, equivalent to an hourly rate of $19.64[36]
- A single-parent family needs an annual income of $48,962 equivalent to an hourly wage of $23.54[37]
- A single adult needs an annual income of $22,943, equivalent to an hourly wage of $11.03[38]

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[34] *The California Budget Project, Making Ends Meet: How Much Does it Cost to Raise a Family in California?* October 2003, as downloaded from www.cbp.org.

[35] Regional estimates within the state of California for this family range from $45,845 to $40,204 ($11.02 to $16.68 per hour).

[36] Regional estimates within the state of California for this family range from $34,659 to $48,344 ($16.66 to $23.24 per hour).

[37] Regional estimates within the state of California for this family range form $35,894 to $61,986 ($17.26 to $29.80 per hour.

[38] Regional estimates within the state of California for this family range from $18,616 to $27,781 ($8.95 to $13.36 per hour).

As indicated by Table 1, according to the report the hourly wage needed to support the basic family budget is two to three times the state's minimum wage ($6.75 per hour). The hourly wage required by single parents and the employed parent in a two-parent family where only one parent works also exceeds the 2002 median hourly wage ($14.06).[39] A single parent must earn almost as much as two working parents in order to pay for child care, while realizing only modest savings for food, housing and other household expenses. On the other hand, a two-parent family in which only one

TABLE 1
HOW DOES THE CALIFORNIA BASIC FAMILY BUDGET COMPARE?[40]

Budget	Hourly Wage[41]	Annual Income
Basic Family Budget for a Two-Parent Family Where Both Parents Work	$14.01	$58,269
Basic Family Budget for a Two-Parent Family Where One Parents Works	$19.64	$40,848
Basic Family Budget for a Single-Parent Family	$23.54	$48,962
Basic Family Budget for a Single Adult	$11.03	$22,943
2002 State Median Wage[42]	$14.06	$29,245
2002 State Minimum Wage	$6.75	$14,040
2003 Federal Poverty Guidelines for a Family of Three[43]	$7.34	$15,260
2003 Federal Poverty Guidelines for a Family of Four[44]	$8.85	$18,400

Source: *The California Budget Project, Making Ends Meet*, 2003.

[39] The hourly wage standard estimated in this report assumes full-time employment for 40 hours per week, 52 weeks per year, and does not allow for any unpaid days off during the year. Moreover, part-time or seasonal workers would need higher hourly wages to earn the same annual income.

[40] The authors say that it is important to note what is not included in the basic family budget. For example, these estimates assume that the families rent, not own, their homes and live in housing that many would consider overcrowded for three to four person households. The budget assumes that families use home-based child care, rather than more expensive center-based care and that health coverage is purchased privately with no assistance from an employer.

[41] Hourly wage is the amount that each parent must earn. Annual income is the sum of both parents' earnings assuming full-time work.

[42] All wage and salaried employees (excluding the self-employed), assumes 40-hour work week, 52 weeks per year.

[43] Assumes 40-hour workweek, 52 weeks per year.

[44] Assumes 40-hour workweek, 52 weeks per year.

parent works can live on less than a single-parent family, since one parent can stay home with the children.

The report illustrates the difficulties that families face in meeting basic living expenses and provides insights into the inabilities of low-income consumers to pay their utility bills. The basic family budgets presented in the report all require incomes much higher than those provided by minimum wage work and in some parts of the state, more than the median income**.** Research conducted on the impact of welfare reform in California finds that individuals leaving welfare for work earn about $500 per month, 12 percent of the basic family wage estimated for a single-parent family in the report.[45] Even with subsidies such as Medi-Cal, child care assistance and other public programs, many of these families have difficulties making ends meet.

Statistics such as these enable us to better understand the economic choices facing many low-income consumers. It also helps us to understand the complexity of the issues associated with eliminating the problem of utility disconnections. When we address factors associated with eliminating disconnections, we cannot merely focus on lowering thermostats or putting plastic on windows as these are only part of the story; it is also enlightening to be aware of all of the factors that contribute to the poverty status of low-income consumers. This understanding is very important to both policymakers who must address issues of disconnection and frontline call center staff--at both utilities and state public utility commissions--who directly interact with consumers faced with disconnection notices.

The Energy Burden of the Poor

As indicated by Table 2, low-income consumers feel the impact of high-energy prices much more sharply than do other income groups. The average low-income family spends substantially more of their income on annual energy costs than other consumers. According to a recent study on the national home energy affordability gap, the burden for total home energy is deemed “affordable” when it represents no more

[45] Jacob Alex Kerman, et al. *Welfare Reform in California: Early Results from the Impact Analys*is (RAND statewide CalWORKs evaluation: 2002, 61 as cited in *The California Budget Project, Making Ends Meet: How Much Does it Cost to Raise a Family in California?* October 2003, as downloaded from www.cbp.org.

than six percent of the household's gross income.[46] Yet the report found that in many states, the average energy burden faced by households with incomes below 50 percent of the poverty level is far greater than the norm of six percent: it ranges from 32.9 percent (Colorado) to 61.3 percent (Vermont) of the gross household income. California households below 185 percent of the poverty level received energy bills that, on average, exceeded the affordability level by $544 per household.[47] A survey of LIHEAP recipients in Iowa reported that the surveyed households paid on average 19 percent of their incomes on heating bills during the 1999-2000 winter seasons, a percentage that the report considered "an affordability crisis."[48] The results of the 2003 NEADA study of LIHEAP recipients indicated that survey respondents paid an average of 13 percent of their family income for total energy costs.

TABLE 2
ENERGY BURDENS ON CONSUMERS

Oct. 2000-Sept. 2001	Low-Income Average	All Other Averages
Total Estimated Annual Bills for All Fuels	$1,531	$1,912
Energy Burden (Bills/Annual Income)	19.5%	4.6%

Source: The NFFN, NEADA, The National Low-Income Energy Consortium with support from Citizens Energy, *The Cold Facts: The First Annual Report on the Effect of Home Energy Costs on Low-Income Americans, 2001-2002*. (Washington, D.C.: National Fuel Fund Network, 2001).

[46] Roger Colton, *National Home Energy Affordability Gap (*Belmont, MA: Fisher, Sheehan & Colton, 2003).

[47] Ibid. 7.

[48] J.M. Mercier and C.R. Mercier and S. Collins, S. *Iowa's Cold Winters: LIHEAP Recipient Perspective.* (Ames, IA: Mercier Associates, 2002), 4.

CHAPTER 3

ENERGY ASSISTANCE PROGRAMS

LIHEAP

LIHEAP Funding

In this update, we describe the federal and state programs of assistance to low-income consumers, as well as discuss the need fro better data on nonpayment of energy bills. LIHEAP is a federal program providing formula grants to states to help low-income families pay their heating and cooling bills. This is a block grant program administered by the U.S. Department of Health and Human Services (HHS). Congress established the formula for distributing funds to the states based on each state's weather and low-income population. The LIHEAP statute also authorizes a contingency fund of approximately $850 million. The President may release these funds to assist with the home energy needs caused by an emergency situation. These funds have been released in response to emergency situations arising from extreme weather conditions or energy-price increases. Funding amounts are distributed on a state-by-state basis as determined by the degree to which specific states are impacted by the adverse condition.

In order to be eligible for LIHEAP assistance, a household's income must not exceed the greater of 150 percent of the federal poverty level or 60 percent of the state's median income. The highest level of LIHEAP assistance is directed to those households with the lowest incomes and the highest energy costs or needs in relation to income and family size.

The average LIHEAP household has an income of less than $10,000 and is primarily comprised of low-income elderly, disabled and working-poor families with children. The energy burden for low-income households is approximately four times the average energy burden for all other households.[49] If they did not receive LIHEAP

[49]"Testimony of Leslie Lee, LIHEAP Director, State of Delaware, Before the Subcommittee on Education and the Workforce, U.S, House of Representatives Regarding the Reauthorization of the Low-Income Home Energy Assistance Program, July 8, 2003, available at: http://www.neada.org/.

funding many of these households would have to choose between paying their energy bills and other vital necessities, such as food, medicine or shelter. This is especially salient for households with elderly members, young children, disabled or chronically ill members—as their members are more vulnerable to weather-related illnesses.

In FY 2002, LIHEAP provided $1.7 billion in regular grant assistance to over 4.6 million households throughout the United States. For FY 2003, LIHEAP provided $178.8 billion in regular grant assistance plus $200 million in emergency funds to almost 4.6 million households. For FY 2004, LIHEAP is providing $1.789 billion in regular assistance plus $999.4 million in emergency assistance.[50] The total number of households receiving LIHEAP increased by about 376,000 between 2002 and 2003 and is projected to increase by almost 286,000 more in FY 2004.[51] This is increase is attributed to continued high unemployment among low-wage workers, rapidly rising energy prices and very cold weather conditions in many parts of the country.[52]

The testimony of Leslie Lee, LIHEAP Director for the State of Delaware, is illustrative of the situation in Delaware, which is very similar to that of the rest of the country:[53]

> During the current fiscal year, Delaware provided assistance to 13,179 households during the winter heating season, an increase of 11 percent over last winter's heating season. The average benefit was $301. In addition to the 13,000 plus households that received a regular heating assistance benefit, Delaware helped 4, 242 households with a supplemental crisis benefit, an increase of 57 percent over last winter's heating season. Many of the households that received the regular benefit received an additional crisis benefit of approximately $200. These households served are directly related to the very cold winter we had and the effects of the weaker economy.

[50] For more information see: http://www.neada.org/.

[51] For further information see: NEADA, "States Report that Low-Income Home Energy Assistance Programs Rapidly Increase Adding Almost 661,000 New Families," press release issued Mar. 10, 2004, available at: http://www.neada.org/comm/press/pr040310.pdf.

[52] Ibid.

[53] "Testimony of Leslie Lee."

Survey of LIHEAP Recipients [54]

In October 2003, NEADA conducted the first national survey of choices made by LIHEAP-recipients households when they cannot afford to pay their energy bills. Findings of the survey speak to the merits of the program, the ability of the program to reduce the number of disconnections as well as mitigate the consequences arising from the harsh choices resulting from soaring energy bills. The survey results also address the strategies used by LIHEAP recipients to reduce their energy bills—many of which are safety risks. The findings of the study also speak to the grave financial situations faced by LIHEAP recipients, the choices that they must make in order to avoid disconnection and the severe impacts of high energy bills on recipients' health, safety and emotional well-being. Areas addressed in the survey include the following:

- Who receives LIHEAP
- Whether LIHEAP makes a difference
- Consequences of unaffordable energy bills
- Actions taken by LIHEAP recipients to reduce their energy bills

Key findings of the study include the following:

- Low-income households spend an inordinate amount of their household income on residential energy
- Households that receive LIHEAP face significant hardship in attempting to pay their energy bills
- LIHEAP makes a significant difference for most recipient households
- However, LIHEAP still only reaches a small fraction of eligible households[55]

[54] See NEADA, *National Energy Agency Directors Association Survey Report*, April 2004. The report is available at: http://www.neada.org/comm/surveys/NEADA_Survey_2004.pdf.

[55] Over 4.6 million households received LIHEAP in 2003; this figure is only 13 percent of the over 34.6 million households that had income below the federal maximum LIHEAP standard. Although the Federal maximum LIHEAP standard is 150 percent of poverty or 60 percent of state median income, many states limit eligibility to households with income below lower limits.

Who Receives LIHEAP?

According to the survey, the majority of the recipients has at least one member who is disabled (43 percent), and/or elderly (41 percent) and/or have a child under the age of five years old (18 percent). Most families are very low-income; 74 percent have incomes below $15,000 and 50 percent have incomes below $10,000. Almost 43 percent are homeowners, 36 percent are working or self-employed and 36 percent are retired. In addition 31 percent were unemployed at least sometime during the year. These LIHEAP families pay an average of 13 percent of their family income for total energy costs, as compared to 3 percent for all other families. The survey results indicate that LIHEAP recipients practice energy conservation methods in both the winter and the summer. Specific conservation methods used include the following:

- 44 percent put plastic on their windows
- 76 percent turned down the heat when they went to bed
- 83 percent kept shades and curtains closed during the daytime in the summer
- 78 percent used fans and opened windows
- 65 percent washed clothes in cold water
- 44 used compact fluorescent light bulbs

Does LIHEAP Make a Difference?

Results of the survey indicated that LIHEAP is instrumental in helping a significant number of low-income consumers meet their energy needs. Without LIHEAP only 9 percent of the respondents had an energy burden of less than 5 percent, and after LIHEAP the proportion of respondents with an energy burden of less than 5 percent increased to 27 percent. With an average 2003 LIHEAP grant of $313, the proportion of families with energy burdens approximating 25 percent declined from 12 percent to 4 percent. Moreover, 88 percent of the respondents replied that LIHEAP had been very important in meeting their energy needs. Statistics of note include the following:

- 62 percent who lost their heat due to an inability to pay their energy bills reported that LIHEAP helped to restore their heat
- 54 percent of recipients said their homes would have been kept at an unsafe or unhealthy temperature if LIHEAP assistance had not been available
- 48 percent said they would have had their fuel source discontinued if LIHEAP had not been available

Results of the study indicated that high energy bills have the capability of creating long-term impacts on the physical and emotional health, safety and economic well-being of LIHEAP families. Impacts on health included going without food, medicine medical or dental care and illness caused by the inability to combat cold or hot temperature homes. Impacts on shelter included utility disconnections, homelessness, eviction, missed rent or mortgage payments and having to move in with others. Specific impacts on health and safety include the following:

Impacts on health

- 22 percent went without food for at least one day
- 38 percent went without medical or dental care
- 30 percent did not fill a prescription or take the full dose of a prescribed medication
- 21 percent became sick because their home was too cold
- 7 percent became sick because their home was too hot
- 5 percent reported a related illness resulted in doctor or hospital visits[56]

Impacts on shelter

- 28 percent missed a rent or mortgage payment
- 9 percent reported moving in with family or friends
- 4 percent were evicted
- 4 percent were homeless

[56] On the other side of the spectrum, 20 percent said that they were not able to pay their energy bills due to medical expenses.

- 17 percent were unable to use their main source of heat due to discontinued service or an inability to pay for heat
- 30 percent used their kitchen stove for heat
- 51 percent were unable to pay their entire energy bill
- 8 percent had their electricity disconnected due to nonpayment
- 10 percent reported that their heating system broke and they were unable to pay for a repair or replacement
- 12 percent reported being unable to use their air conditioner because it was broken and they were unable to pay for a repair or a replacement
- 6 percent reported being unable to use their air conditioner because their utility company discontinued service

Federal Weatherization Program

The federal Weatherization Assistance Program enables low-income families to permanently reduce their energy bills by making their homes more energy efficient. During the past two years, the U.S. Department of Energy's (DOE) Weatherization Assistance Program has provided weatherization services to over 5.2 million low-income families. In 2003, the goal is to weatherize 93,750 homes.[5758]

These programs provide improvements of the thermal efficiency of homes by providing installation of weatherization materials such as attic insulation, caulking, weather-stripping, furnace efficiency modifications, and replacement furnaces, boilers and air conditioners.[59]

All low-income households are eligible to receive weatherization assistance. According to federal guidelines, a low-income household is one whose combined income falls at or below 125 percent of the poverty level determined by the Office of

[57] http://www.eere.energy.gov/weatherization/.

[58] Federal weatherization programs are administered at the state level and information about individual state programs can be found at: http://www.eere.energy.gov/weatherization/state_activities.html.

[59] See: http://ww.cfda.gov/public/viewprogra.asp?progid+874.

Management and Budget's poverty income guidelines or the basis on which federal, state or local cash assistance payments have been made.[60]

By reducing the energy bills of low-income families instead of offering aid, weatherization reduces dependency on governmental aid. On average, weatherization reduces heating bills by 32 percent and overall energy bills by $200 to $250 per year. This spending in turn spurs low-income communities toward job growth and economic development.[61]

Programs such as these have positive impacts on the well being of their recipients, as well as on the communities where they live and even on the finances of a state. A study on the economic impacts of home energy assistance in Colorado indicates that energy assistance programs benefited the economic activity of the state by increasing its level of earnings and employment, particularly among low-income families. Energy assistance helped recipients modify their utility payment patterns, retain additional income, as well as prevent illness and loss wages attributable to unaffordable energy bills. The additional income retained by assistance recipients is typically spent on their own communities, which creates a ripple effect on the economic activity of the area and eventually of the state.

National Fuel Funds Network (NFFN) Initiatives[62]

NFFN consists of 250 members, including nonprofit agencies, utilities and government agencies, which provide utility bill assistance raised as charitable donations. In 2001-2002, fuel funds—which operate as energy banks, charitable energy assistance programs or bill assistance programs, provided approximately $125 million in energy aid to almost two million households. Fuel funds are the providers of last resort to families whose federal energy assistance has expired. The goals of the NFFN are as follows:

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[60] A state may also elect to make all homes eligible under the HHS LIHEAP program eligible for weatherization assistance and may use either 150 percent of poverty or 60 percent of state median income.

[61] See: http://www.eere.energy.gov/weatherization/state_activities.html.

[62] For further information about NFFN see: http://www.nationalfuelfunds.org/.

- Increase public awareness and understanding of low-income energy issues
- Influence energy related policies beneficial to low-income people
- Assist in the creation and development of fuel funds
- Promote communication and coordination among all parties concerned with low-income energy issues on national, regional and statewide levels

Across the country, stakeholders have created new partnerships, expanded their appeals and employed innovative ideas to garner more funds for those in need. Examples reported during the first quarter of 2004 include the following:[63]

- On Oct. 13, 2003, the Keep Wisconsin Warm Fund raised over $25,000 through a one-day fundraising event with Culver's Frozen Custard and Butter Berger restaurants
- The Heat and Warmth Fund in Michigan raised over $400,000 at its annual Night of Warm Hearts gala. The event, which included dinner and an auction, raised $208,000, which was matched by DTE Energy, Consumers Energy, SEMCO Energy and Aquila.
- Georgia Natural Gas donated $250,000 to the Heating Energy Assistance Team Inc., a nonprofit organization that raises funds to assist low-income residents in Georgia with winter heating costs. Funds are distributed by the Georgia Department of Human Resources through local community action agencies.
- KeySpan Foundation granted $120,000 to help fuel funds provide energy assistance to low-income families in its service area. The money was to be divided among the United Way of Long Island's Project Warmth, Heartshares in New York City, the Salvation Army in Boston and the Neighbor Helping Neighbor Fund in New Hampshire.
- The Sacramento Municipal Utility District has partnered with the Sacramento Food Bank and the Salvation Army in a new bill assistance program called

[63] The National Fuel Funds Network*, National Assistance Report*, 1st Quarter Report, 2004, 1 and the Energy Safety Net Bulletin #54 both are available at: http://www.nationalfuelfunds.org/.

Energy Help. Consumers can make a monthly donation to the organization of their choice through a line item on their utility bills.

- Citizens Gas, Vectren Energy Delivery Inc. and the Indiana Office of Utility Consumer Counselor were seeking the approval of the Indiana Utility Regulatory Commission to create a Universal Service Fund that would lower the monthly gas heating bills of low-income consumers as much as 50 percent over the next two years. The Universal Service Fund would be supported by combining the utilities' federal LIHEAP allotments and monies from the Citizens Gas' Warm Heat Warm Home energy assistance fund and Vectren's Share the Warmth energy assistance program.

State Actions

State-Mandated Programs

Other sources of assistance for low-income consumers include programs that are state-mandated. Examples of such programs are demand-side management programs, company-specific assistance programs and customer assistance programs funded by contributions from residential customers. Examples of various types of programs are presented below:[64]

- In Minnesota all state-jurisdictional gas utilities are required to spend at least 0.5 percent of their gross operating revenues on conservation improvement programs such as weather audits, weatherization and rebates towards the purchase of energy-efficient appliances. A portion of this money must be spent on residential conservation improvement programs for renters and low-income persons.
- The Ohio Percentage of Income Program (PIP) is a state-mandated, company-specific program. Participants pay the gas utility a fixed percentage of income for utility service, regardless of usage. The Ohio PIP programs are

[64] The NARUC Natural Gas Task Force, *Natural Gas Information Toolkit*, November 2003.

individually administered by each gas company and are funded by mandatory contributions from the utilities' customers.[65]

- California's Alternative Rates for Energy program (CARE) is a state-mandated program that provides low-income customers a 20 percent discount on their electric and natural gas bills, is funded through a rate surcharge paid by all other utility customers.
- One customer assistance program (CAP) is a program currently operated by a Kentucky gas utility and funded by a mandatory contribution from residential customers. Here customer funding is matched, dollar for dollar, by the company's shareholders. The funding is capped at 1.5 cents per Mcf or about $1.50 per customer per year and the program is administered by a low-income advocacy organization.

Many states have also responded to the problem of high energy prices in ways other than direct assistance. In summer of 2003, the NRRI compiled responses regarding state actions with regard to high gas prices.[66] The responses of the 19 participating states indicate that a wide variety of strategies are being utilized. A number of the states have required gas utilities to educate consumers on what to expect in terms of winter prices. Some have also held public meetings with various stakeholders to discuss the gas-price problem and mitigations strategies. Examples of innovative state actions are presented below:[67]

- The Tennessee Regulatory Authority took several proactive steps including: hosting a gas symposium, issuing press releases on consumer conservation tips and low-income assistance, conducting regional workshops to educate consumers on the current gas-supply situation, partnering with gas utilities to

[65] Some programs may require customers to make a monthly contribution to any arrearage.

[66] Because many states have budget and payment plans in place, those mitigation strategies are not discussed here.

[67] The NARUC Natural Gas Task Force, *Natural Gas Information Toolkit*, November 2003.

produce consumer education, and establishing partnerships with nonprofit community organizations to disseminate information.

- The Oklahoma Corporation Commission developed a new tool, the Oklahoma Energy Outlook, for assisting consumers in planning their energy budgets. This forecasting tool combines information form the commission's Oil and Gas and Public Utility divisions to project oil and gas production data and the effect that natural gas price changes would have on future electric and natural gas bills.[68]

State Do-Not-Disconnect Rules

A number of factors make it likely that many low-income consumers will find it difficult to pay their energy bills, even with LIHEAP and/or other forms of financial assistance, and will be faced with disconnection notices. All but 17 states have disconnection moratoria which are either date or weather specific.[69]

Research conducted by the author in 2003 illustrates the commission rules regarding dollar amount and time period thresholds for electric utility service disconnection.[70]

In many instances low-income consumers, who are unable to pay their bills in early winter, are also unable to pay the six months of accumulated bills in spring and face disconnection at that time. Many consumers do benefit from do-not-disconnect rules. Consumers who are temporarily unemployed in winter and are employed in spring do benefit. However, for many consumers do-not-disconnect rules only provide a temporary solution to the problem. Moreover, consumers who are disconnected in spring, when the weather is warm, often do not feel the impact of the disconnection until

[68] See www.occ.state.ok.us.

[69] States which do not have a moratorium on shut-offs include: Alaska, Arizona, Arkansas, California Colorado, Florida, Hawaii, Louisiana, Maryland, Nevada, New Mexico, New York, North Dakota, Ohio, Oregon, South Carolina and Virginia. For more information see: http://www.neada.org/news/news040303.pdf.

[70] See: Francine Sevel, Commission Rules Regarding Dollar Amount and Time Period Thresholds for Utility Service Disconnection, available at: http://www.nrri.ohio-state.edu/programs/caffairs/.

the cold weather season and unfortunately for them there are no state rules which require reconnection regardless of payment status.

The income instability characteristic of working-poor utility customers only aggravates their situation, as it affects their ability to pay utility bills, as well as to successfully participate in the deferred payment arrangements established by utilities.[71] While a budget billing option is usually available, low-income customers can still be faced with energy bills greater than they can pay, particularly during periods of involuntary unemployment, underemployment or part-time employment.

Collections Data

Despite the efforts of many consumer groups, legislative offices and commissions to quantify the extent of the problems of nonpayment for low-income consumers in order to formulate state and national policies and programs to address these problems, at present a body of national data which speaks to this issue does not exist. Although a number of individual states, such as Iowa, Massachusetts, Ohio, Pennsylvania and Rhode Island, regularly collect this data, there is a dearth of national information available regarding the actual number of residential electric and gas accounts unable to meet their payments.

In most instances where data is not obtainable, states do not require the companies to collect the data. These states may feel that the number of companies in question is too large to make the project feasible. In other instances, companies may be reluctant to release the data. From the company perspective, this is often considered to be confidential information and the company is reluctant to release the information, even if it aggregated with the data of other companies, for fear that it will reflect poorly on the company.

This information is vital for the assessment of the sufficiency of LIHEAP funding, as well as a baseline for addressing the issues of alternatives to disconnection. Without solid national information regarding collections and disconnections it is impossible to accurately assess the severity of the problem or the effectiveness of public policy

[71] NFFN, *A Fragile Income: Deferred Payment Plans and the Ability to Pay of Working Poor Utility Customers,* Energy Safety Net Toolkit No. 4. Washington, D.C.: NFFN, March 2002.

regarding alternatives to disconnection. Not only is the data important to utilities and public utility commissions which directly address consumer problems associated with utility disconnections, it is also important to social service and government agencies that provide policies and programs that address the need for all consumers to have safe, reliable and adequate utility services, which are of course, necessary to the health, safety and welfare of American households. Longitudinal data of this nature would be very beneficial for analysis of the impact of market forces and weather conditions on the ability of low-income consumers to pay their utility bills. This data would be extremely important to social service and government agencies who must deal with the fallout effects of low-income consumers being disconnected from utility services. This information is also vital to the budget forecasting of these agencies.

The release of LIHEAP emergency contingency funds is contingent on solid data. According to the LIHEAP statue, the definition of "emergency" is as follows: A significant increase in home energy disconnections reported by a utility, a state regulatory agency or another agency with necessary data.[72]

Research Regarding Collections

Research conducted by the NRRI and the NARUC Staff Subcommittee on Consumer Affairs speaks to the lack of concrete information regarding the severity of the problems faced by low-income consumers. In 2003, the NRRI and the NARUC Staff Subcommittee on Consumer Affairs Low-Income Work Group conducted a survey of state public utility commissions concerning the low-income consumers' inability to pay their energy bills.[73]

Nineteen states responded to the survey. In many instances the states did not collect the data and had to rely on the energy companies to furnish the data. In some instances the participating states were not able to collect data from all of the energy companies within the state.

[72] See 42 USC Sec. 8633(1) (D).

[73] See Francine Sevel and Mitch Miller, *NARUC Staff Subcommittee on Consumer Affairs Low-Income Energy Policy Survey*, Columbus, Ohio, 2003). Figures and statistics from this report cannot be cited or distributed without the authors' permission.The survey instrument also posed these same questions for combination utilities; however; only six states were able to provide data for combination utilities.

In other instances a number of the collection variables were not available from either the state or the company. In still other instances the following problems ensued:

- A number of collection data variables are not uniform at the company level or the industry level.
- In some cases, data quality issues existed. Examples include the following:
  - the number of overdue customers was greater than the number of total customers
  - greater than 100 percent of customers received energy assistance
  - responses were partial

Despite the problems of data collection, research results do convey important information regarding the collections process and the challenges faced by both low-income consumers and the energy companies which serve them. According to the research, over the past few years electric and natural gas utility distribution companies experienced high levels of customer arrearages leading to increased service termination for nonpayment. Statistics as of April 2002 regarding utility collections in Pennsylvania illustrate the severity of the problem faced by one state:

Electric

- 4,773,000 residential accounts
- 971,248 residential accounts past due
- 69, 213 accounts disconnected for nonpayment between Apr. 1, 2001, and Nov. 30, 2002
- 44, 146 residential accounts were receiving energy assistance and past due
- $269,267,902 was the total revenue owed on residential accounts

Gas

- 1,494,888 residential accounts
- 240,834 past due accounts

- 36,457 residential accounts disconnected for nonpayment between Apr. 1, 2001 and Mar. 31, 2002
- 214,688 residential accounts were receiving energy assistance and past due
- $112,066,211 was the total revenue owned on gas residential accounts past due as of Apr. 1, 2002

Figures 2 and 3 respectively illustrate the number of utility disconnections for electric and gas utilities between Apr. 1, 2001 and Mar. 31, 2002. Figures 4 and 5 respectively illustrate the percentage of electric and gas residential account disconnections respectively for select states between Apr.1 2001, and Mar. 31, 2002. Figures 6 and 7 illustrate the number of electric and gas residential accounts receiving energy assistance for 2001 to 2002. Figures 8 and 9 illustrate the percentage of electric and gas residential accounts receiving energy assistance for 2001 to 2002.[74]

Although the data is not inclusive enough to portray a definitive picture of the severity of the problem of the inability to pay or the need for alternatives to disconnection, it does provide valuable information within selected states. If the data is collected over time it will provide valuable insights into the impact of market prices and weather on the ability to pay and will provide documentation with which we can better predict the need for emergency funding, such as LIHEAP, prior to the cold weather season.

[74] The following states responded to the survey, which also assessed collections information for combination utilities: Alabama, Alaska, California, Connecticut, Florida, Georgia, Idaho, Illinois, Iowa, Michigan, New Jersey, North Carolina, Ohio, Oregon, Pennsylvania, South Dakota, Tennessee, Washington and West Virginia.

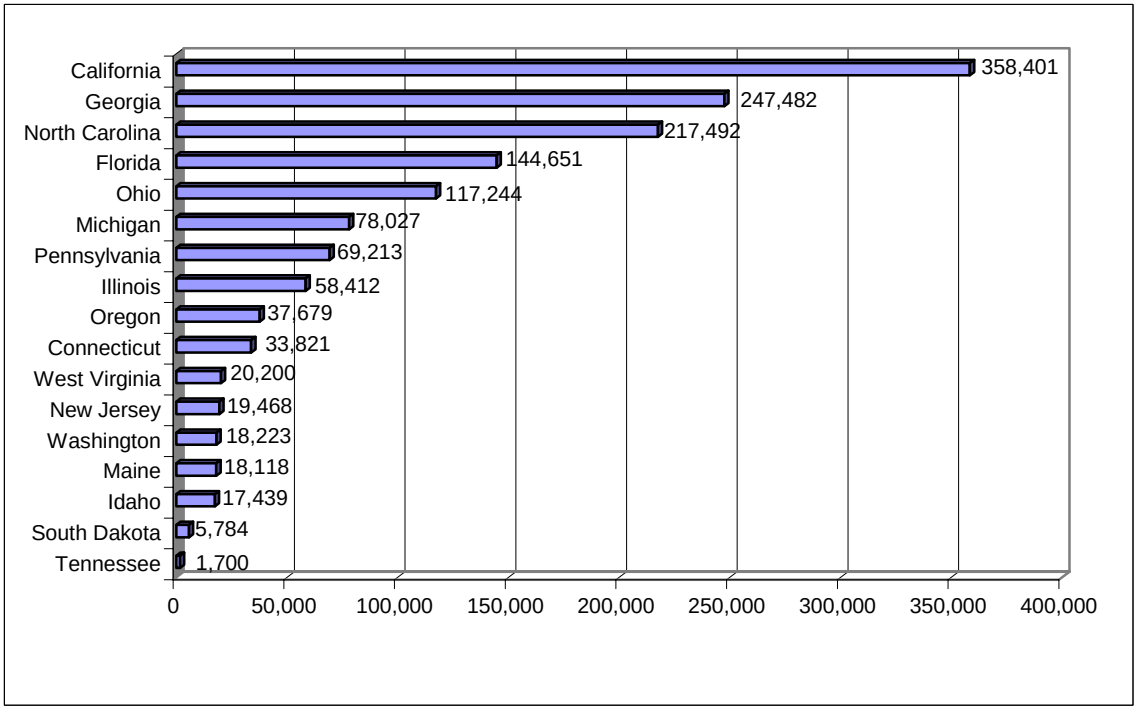

Fig. 2. Number of electric residential disconnections for nonpayment between Apr. 1, 2001, and Mar. 31, 2002: Selected states.

Source: NRRI/NARUC Staff Subcommittee on Consumer Affairs Low-Income Energy Policy Survey 2002.

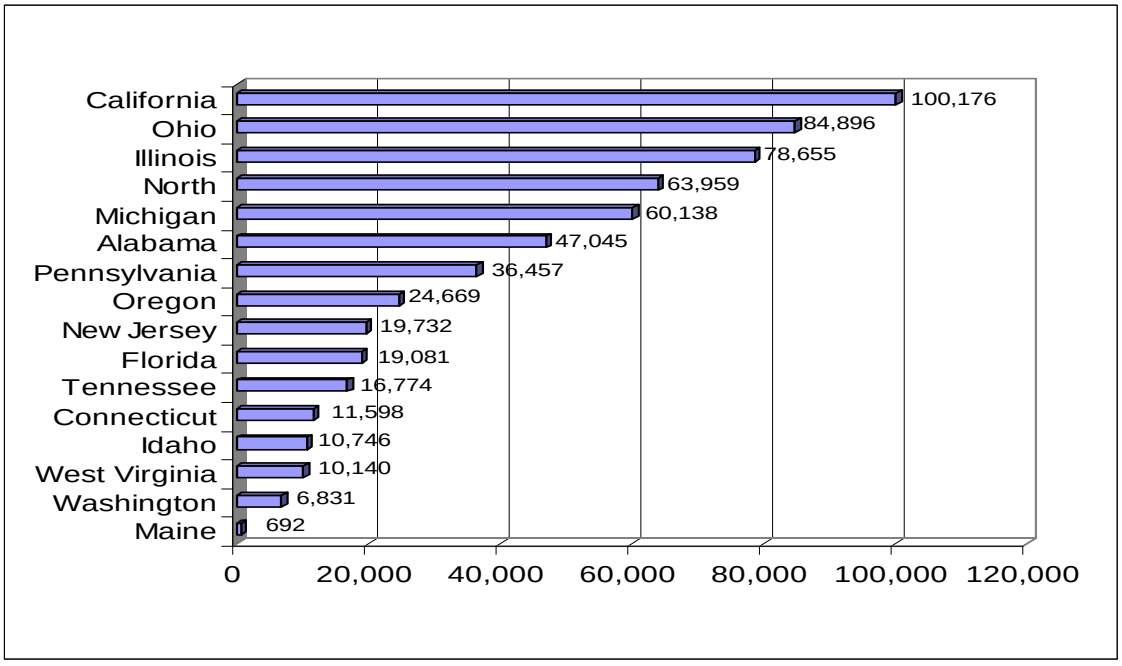

Fig. 3. Number of gas residential disconnections for nonpayment between Apr. 1, 2001 and Mar. 31, 2002: Selected states.

Source: NRRI/NARUC Staff Subcommittee on Consumer Affairs Low-Income Energy Policy Survey 2002.

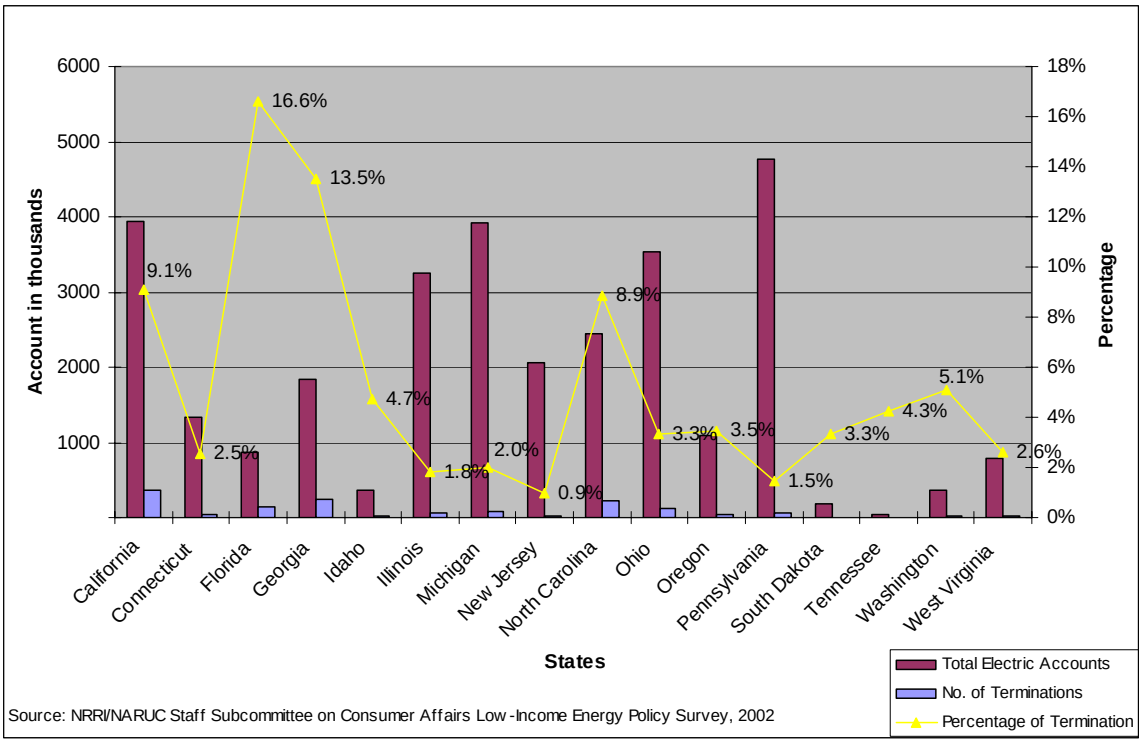

Fig. 4. Percentage of electric residential account disconnections between Apr. 1, 2001 and Mar. 31, 2002: Selected states.

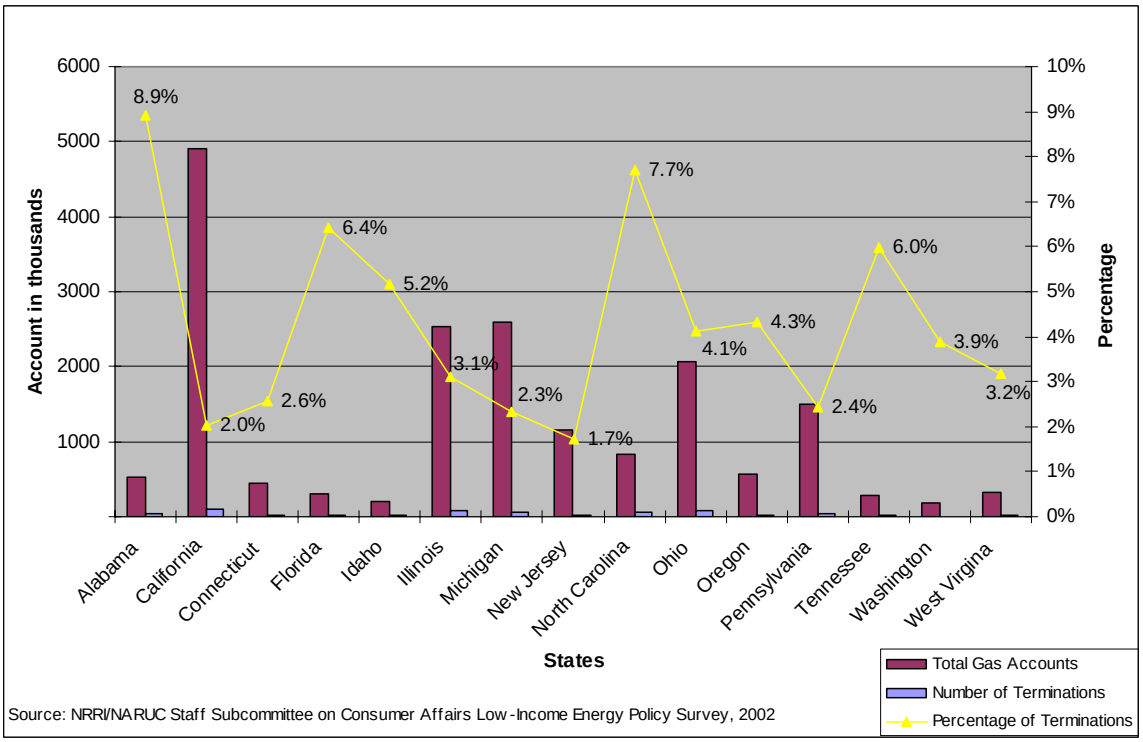

Fig. 5. Percentage of gas residential account disconnections for nonpayment between Apr. 1, 2001 and Mar. 31, 2002: Selected states.

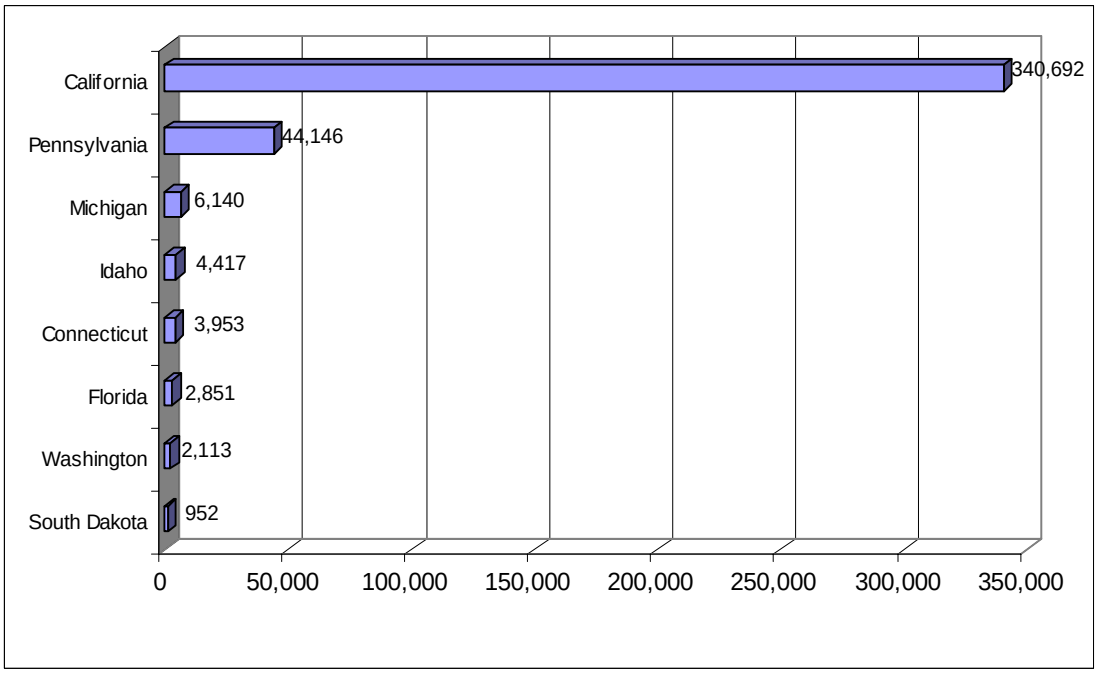

Fig. 6. Number of electric residential accounts receiving energy assistance between Apr. 1, 2001 and Mar. 31, 2002: Selected states.

Source: NRRI/NARUC Staff Subcommittee on Consumer Affairs Low-Income Energy Policy Survey 2002.

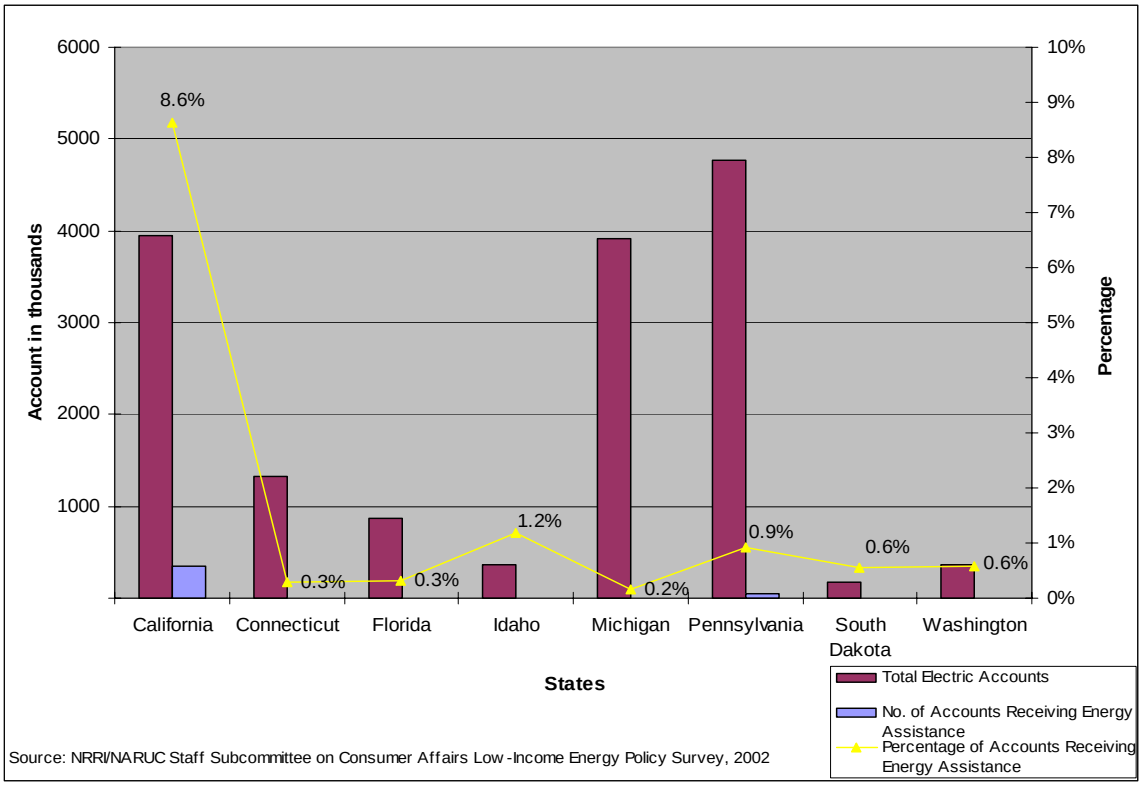

Fig. 7. Number of gas residential accounts receiving energy assistance between Apr. 1, 2001 and Mar. 31, 2002: Selected states.

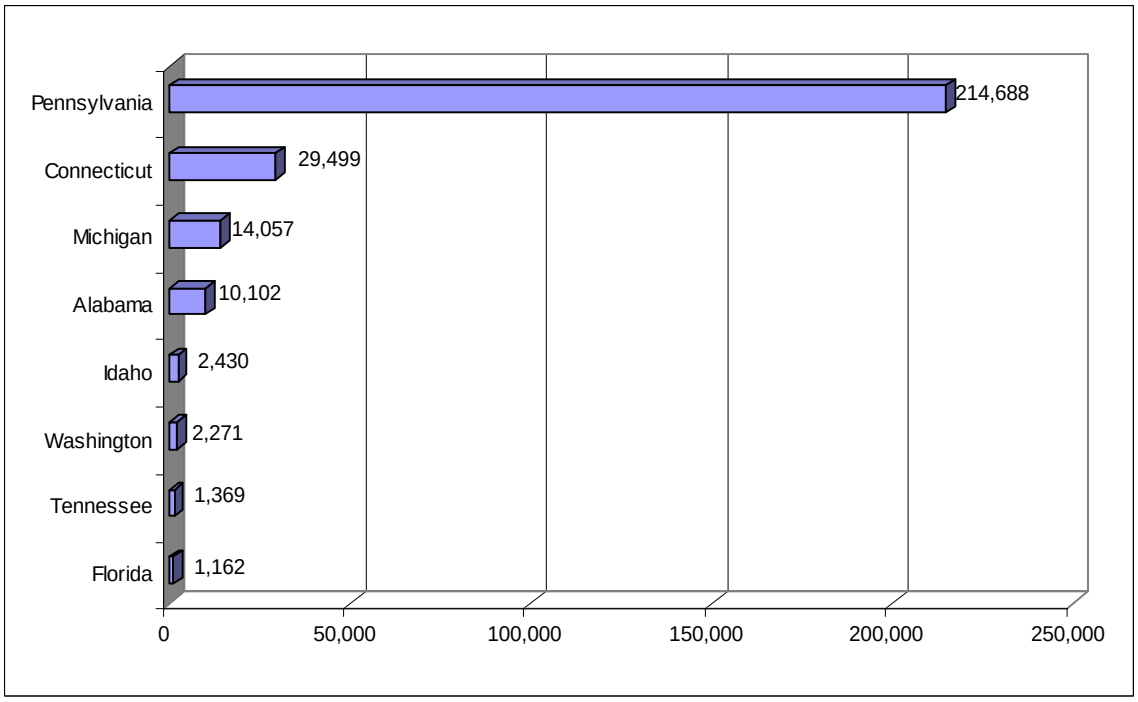

Fig. 8. Percentage of electric residential accounts receiving energy assistance between Apr. 1, 2001 and Mar. 31, 2002: Selected states.

Source: NRRI/NARUC Staff Subcommittee on Consumer Affairs Low-Income Energy Policy Survey 2002.

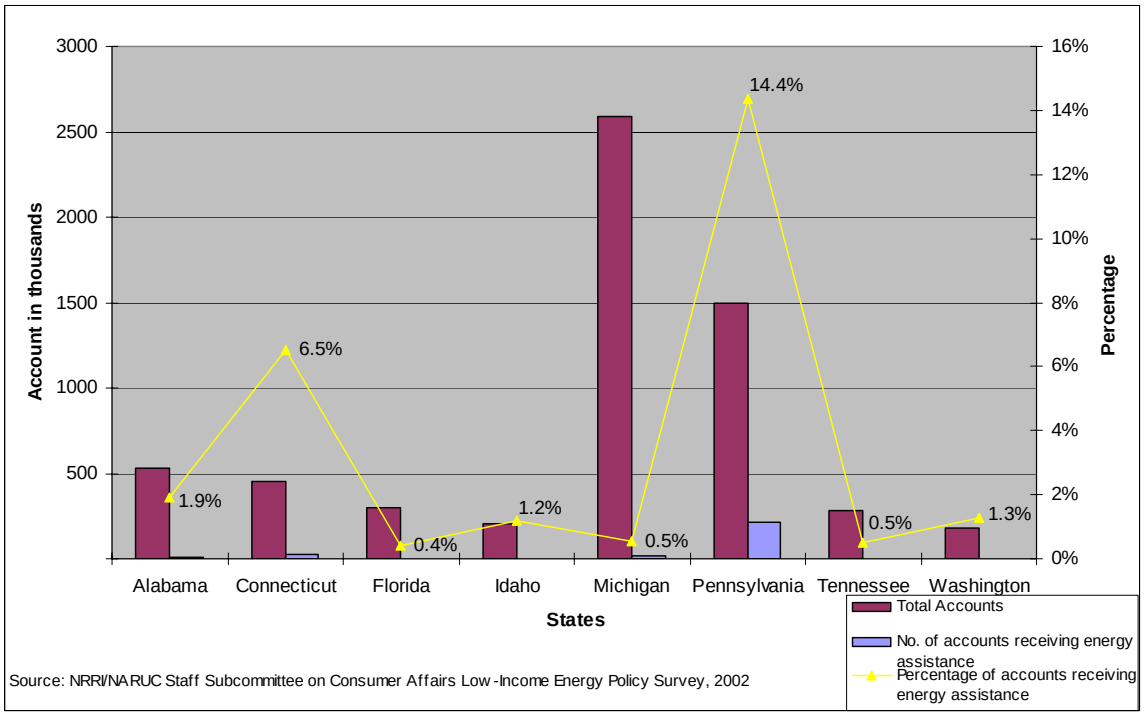

Fig. 9. Percentage of gas residential accounts receiving energy assistance Apr. 1, 2001 and Mar. 31, 2002: Selected states.

CHAPTER 4

LOW-INCOME CONSUMERS' PERCEPTIONS OF ENERGY PRICE AND SERVICE QUALITY

A total of 18,793 Internet users offered opinions on their utility service quality in a survey conducted by the National Regulatory Research Institute and BIGresearch between Jan. 9, 2003 and Feb. 3, 2003. The purpose of the survey was to provide state public utility commissions, utilities and other stakeholders with insights regarding consumer perceptions of utility service as well as the impact of competition on consumer perceptions of utility service and prices. Responses were weighted based on 14 large samples—seven age groups for males and seven age groups for females. These were woven together for a market sample through computer intensive statistical procedure to represent demographic realities. (The survey methodology is provided in the appendix to this report.[75])

An analysis of survey responses of low-income consumers[76] is very valuable for a number of reasons.[77] First, it will allow us to identify the impact of low-income consumers' perception of competition on both service quality and price of energy services. Second, it will help us to identify some factors that may impede low-income consumers from switching energy providers. Third, it will allow us to gain insights regarding the consumer education preferences of low-income consumers. This in turn will help us to effectively target consumer education to low-income consumers.

Specific issues addressed in the survey included the following:

- Age of survey respondents
- Respondents' perceptions of the price of electric service
- Respondents' perceptions of the price of natural gas service

[75] For a description of the survey, see Francine Sevel and Ling Bei Xu, *Consumer Utility Benchmark Survey: A Comparison of Consumer Perceptions of Customer Service* (Columbus, OH: The National Regulatory Research Institute, NRRI 03-03, February 2003).

[76] For the purposes of this report, the term "low-income" refers to household incomes below $15,000.

[77] There were 2,644 respondents with incomes less than $15,000.

- Whether or not respondents had switched electric service providers in the last year
- Whether or not respondents had switched natural gas service providers in the last year
- Respondents' perceptions of the impact of competition on electric service quality
- Respondents' perceptions of the impact of competition on natural gas service quality
- Respondents' perceptions of the impact of competition on the price of electric service
- Respondents' perceptions of the impact of competition on the price of natural gas service

Age of Survey Respondents

As indicated by Table 3, the highest proportion of respondents in the low-income age group was between the ages of 18 to 24 (22.0 percent). The second largest concentration of low-income respondents was in the age group of 35-44 (18.4 percent), followed by the age group of 65+ (17.8 percent). By contrast, the three highest age group concentrations for all other respondents were as follows: 35-44 (22.9 percent), 45-54 (19.2 percent) and 25-34 (18.6 percent).

TABLE 3
RESPONDENTS' AGE

	Income less than $15,000	Others
18-24	22.0%	10.4%
25-34	14.5%	18.6%
35-44	18.4%	22.9%
45-54	16.2%	19.2%
55-64	11.0%	12.2%
65+	17.8%	16.7%

Source: Author's construct, from NRRI/BIGresearch Survey February 2003.

Prices of Energy Services

Respondents were asked to assess whether the price that they pay for electric service was high, fair or low. As indicated by Figure 10 and Table 4, the low-income respondents' perceptions of the price of electric service was fairly similar to that of other survey respondents. The majority of respondents felt that the price of electric service was high (61.9 percent of low-income respondents and 62.9 percent of all others). Slightly over one-third of the consumers felt that the price that they pay for electric service was fair (36.4 percent of low-income respondents and 35.7 percent of all others). Close to 2 percent of the respondents felt that the price that they pay for electric service was low (1.8 percent of low-income respondents and 1.7 percent of all others).

The similarities of the responses of both groups are most likely because all consumers are feeling the impact of soaring energy prices. However, the observed difference may indicate the impact high-energy prices pose for low-income consumers. Whereas other consumers may have to tighten their discretionary spending, low-incomes consumers may face disconnections or have to choose between paying energy bills and omitting or deferring payment for one or more necessities, such as food, medicine or rent, or assuming unmanageable levels of debt.

Similarly, respondents were asked to assess whether the price that they pay for natural gas service was high, fair or low. As indicated by Figure 11 and Table 5, the low-income respondents perceptions of the price of natural gas service was fairly similar to that of other survey respondents. Once again, this is most likely because all consumers are feeling the impact of soaring energy prices. Just over 60 percent of all respondents felt that the price of natural gas service was high (66.5 percent of low-income respondents and 61.5 percent of all others). Slightly over 30 percent of the consumers felt that the price that they pay for natural gas service was fair (31.7 percent of low-income respondents and 36.5 percent of all others). Close to 2 percent of the all respondents felt that the price that they pay for natural gas service was low (1.8 percent of low-income respondents and 2.0 percent of all others).

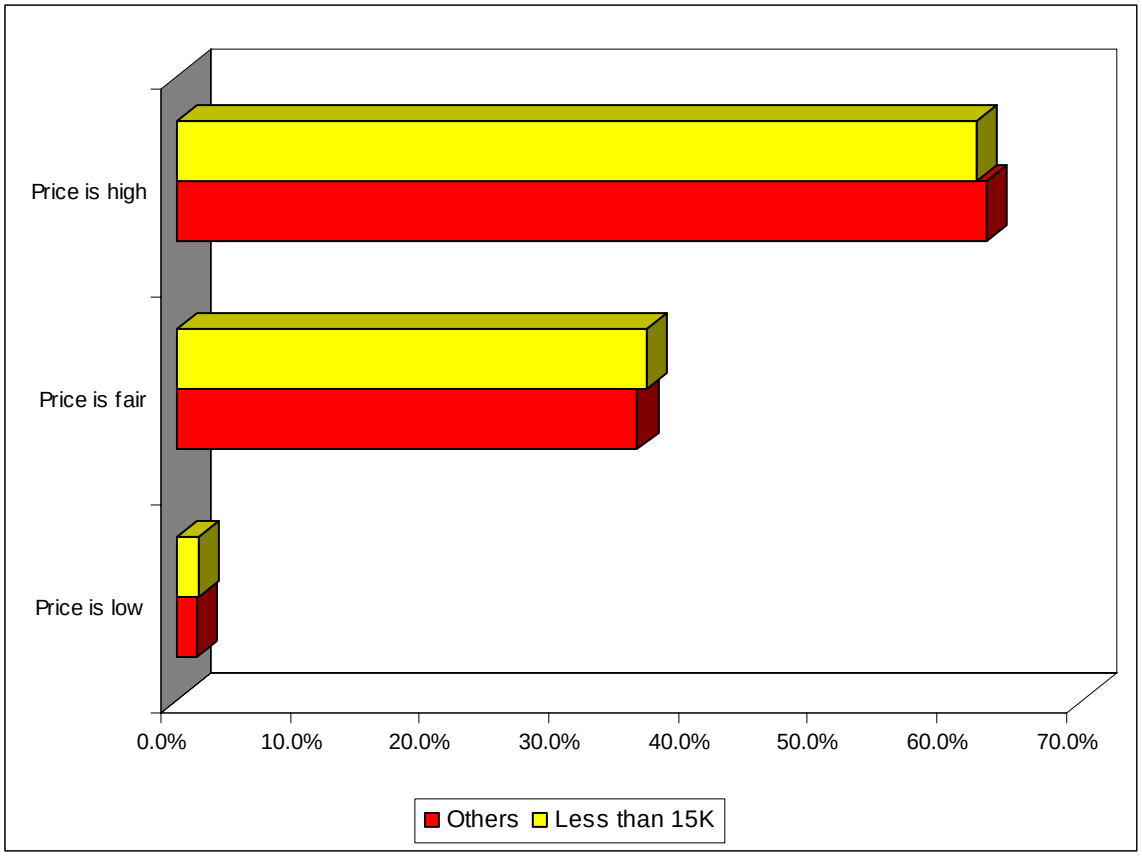

Fig.10. Perceptions of the price of electric service.

Source: NRRI/BIGresearch, February 2003, n=18,793.

TABLE 4
PERCEPTIONS OF THE PRICE OF ELECTRIC SERVICE

Price	Income less than $15,000	All Others
High	61.9%	62.6%
Fair	36.4	35.7
Low	1.8	1.7

Source: NRRI/BIGresearch, February 2003, n=18,793.

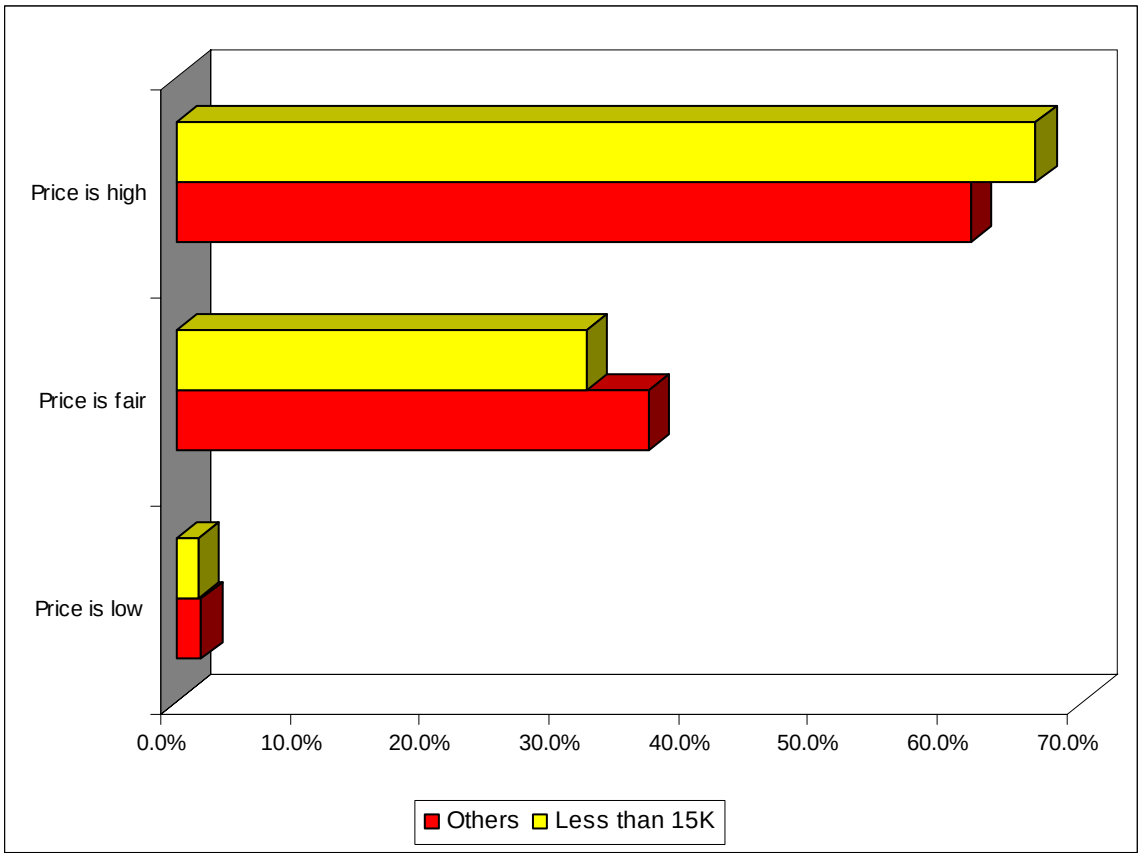

Fig. 11. Perceptions of the price of natural gas service.

Source: NRRI/BigResearch, February 2003, n=18,793.

TABLE 5
PERCEPTIONS OF THE PRICE OF NATURAL GAS SERVICE

Price	Income Less Than $15,000	All Others
High	66.5%	61.5%
Fair	31.7	36.5
Low	1.8	2.0

Source: NRRI/BIGresearch, February 2003, n=18,793.

Switching Patterns of Low-Income Consumers

When looking for solutions to the energy problems of the low-income consumers, one question that comes to mind is: are low-income consumers changing energy providers at the same pace as other consumers? As indicated by Figure 12 and Table 6, only a very small percentage of both groups reported changing electricity providers within the past 12 months. Similarly, as indicated by Figure 13 and Table 7, only a very small percentage of both groups reported changing their natural gas providers within the past twelve months (5.1 percent of low-income consumers and 4.3 percent of all others).[78]

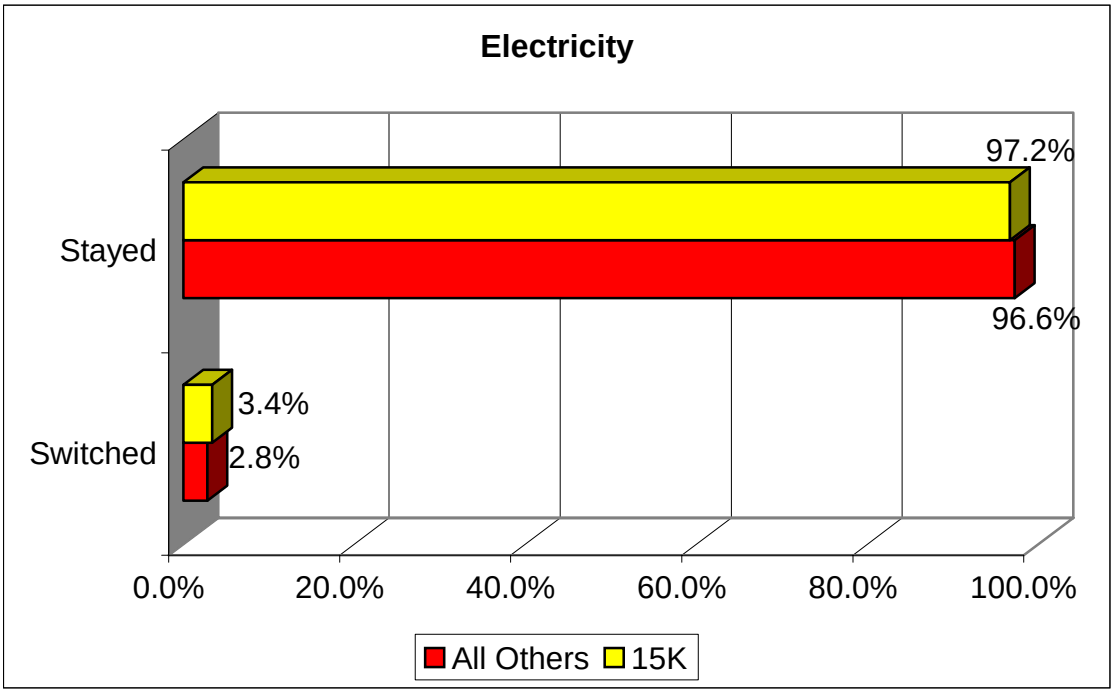

Fig. 12. Electric service switching patterns of low-income consumers vs. all others.

Source: NRRI/BigResearch, February 2003, n=18,793.

TABLE 6
ELECTRIC SERVICE SWITCHING PATTERNS
OF LOW-INCOME CONSUMERS VS. ALL OTHERS

Respondents	Percent Stayed	Percent Switched
Income less than $15,000	96.6%	3.4%
All others	97.2%	3.8%

Source: NRRI/BIGresearch, February 2003, n=18,793.

[78] It is important to remember that the survey did not address whether or not respondents had previously changed providers,

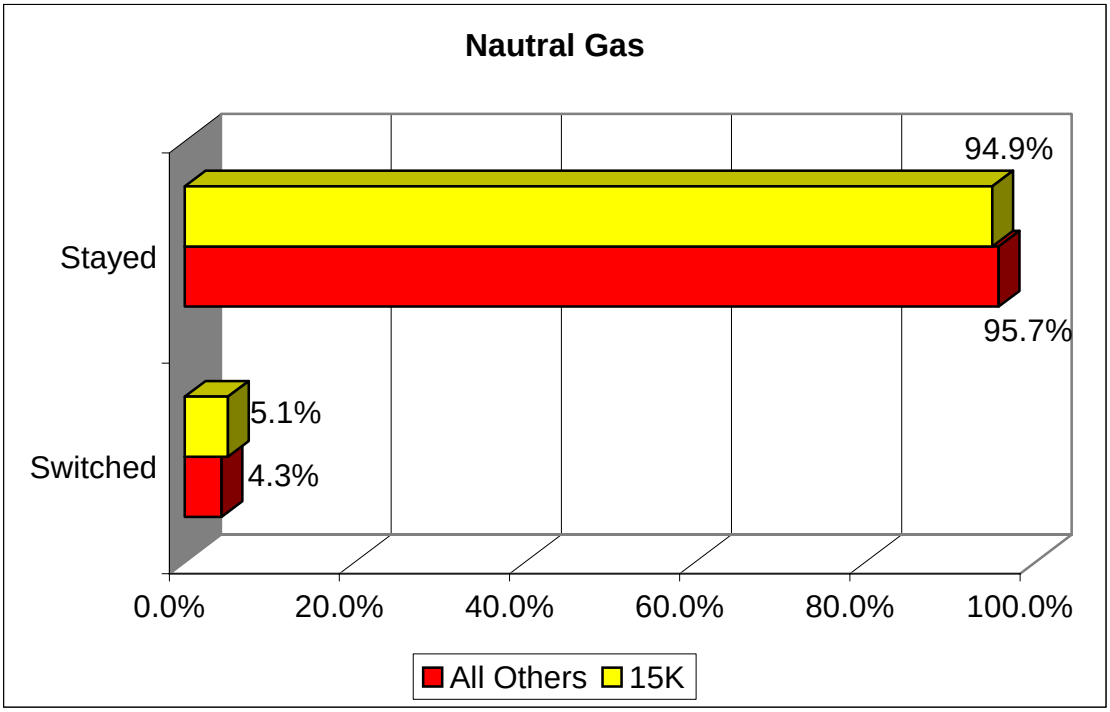

Fig. 13. Natural gas service switching patterns of low-income consumers vs. all others.

Source: NRRI/BigResearch, Feb. 2003, n=18,793.

TABLE 7
NATURAL GAS SERVICE SWITCHING PATTERNS
OF LOW-INCOME CONSUMERS VS. ALL OTHERS

Respondents	Percent Stayed	Percent Switched
Less than 15K	94.9%	5.1%
All Others	95.7%	4.3%

Source: NRRI/BIGresearch, February 2003, n=18,793.

Impact of Competition on Perceptions of Service Quality and Price

The research sought to address the impact of competition on respondents' perceptions of service quality and price. Specifically, the research sought to identify whether or not low-income consumers perceived competition to have impacted service quality and price differently than other respondents.

Impact of Choice on Perceptions of Electric Service Quality

Respondents were asked to assess the impact of competition (choice) in the electric industry on their service quality—more specifically, respondents were asked to assess whether their service is better, the same or worse. As indicated by Figure 14 and Table 8, the low-income respondents perceptions of the impact of competition on electric service quality was fairly similar to all others. The majority of respondents felt that their service quality was the same (85.5 percent of low-income consumers and 84.8 percent of all others). Slightly less of the low-income consumers felt that their service quality was better (6.4 percent of low-income consumers vs. 8.6 percent of all others) and slightly more of the low-income consumers felt that their service was worse (8.1 percent of low-income and 6.6 percent of all others).

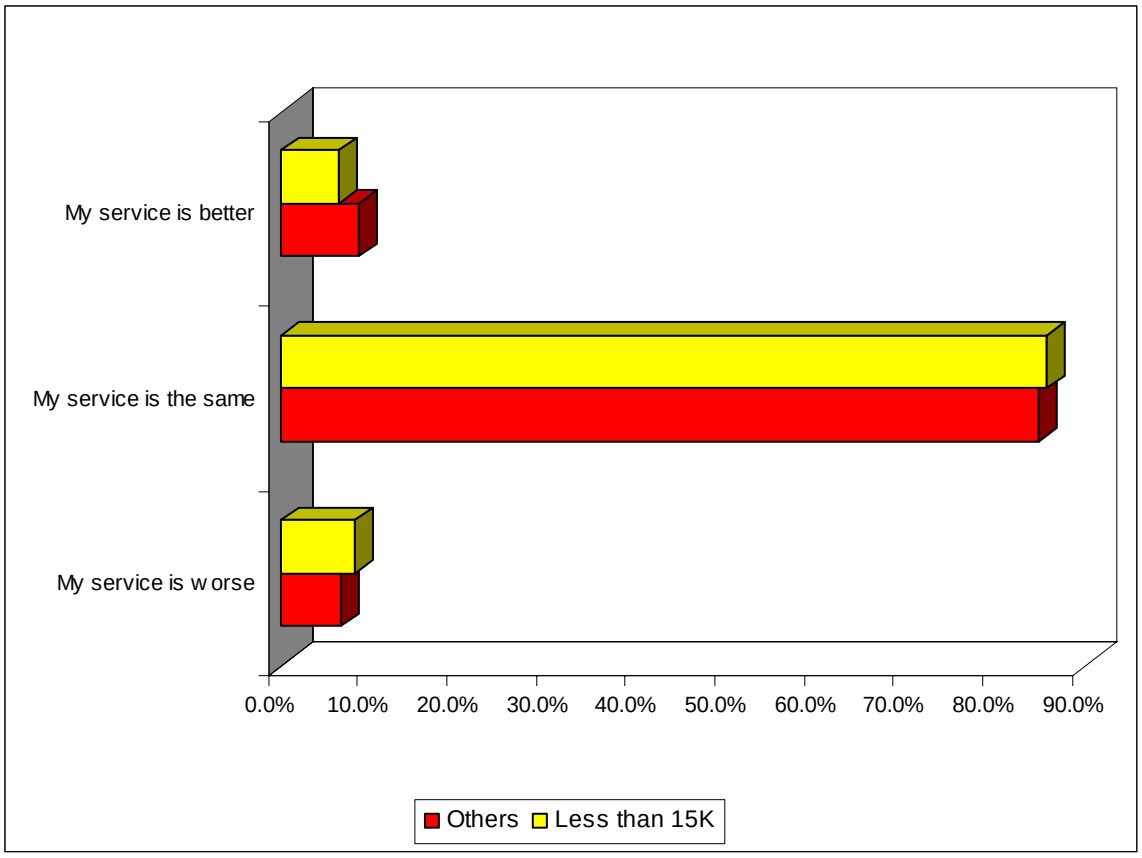

Fig.14. Impact of competition on perceptions of electric service quality.

Source: NRRI/BigResearch, Feb. 2003, n=18,793.

TABLE 8
IMPACT OF COMPETITION ON
PERCEPTIONS OF ELECTRIC SERVICE QUALITY

Service quality	Income Less Than $15,000	All Others
Better	6.4%	8.6%
The Same	85.5%	84.8%
Worse	8.1%	6.6%

Source: NRRI/BIGresearch, February 2003, n=18,793.

Impact of Competition on Perceptions of Natural Gas Service Quality

Respondents were asked to assess the impact of competition (choice) in the gas industry on their service quality—more specifically, respondents were asked to assess whether their service is better, the same or worse. As indicated by Figure 15 and Table 9, majority of respondents felt that service was the same (78.4 percent of the low-income and 85.8 percent of all others). Less than 15 percent of respondents felt that service was better and less than 10 percent of consumers felt that service was worse.

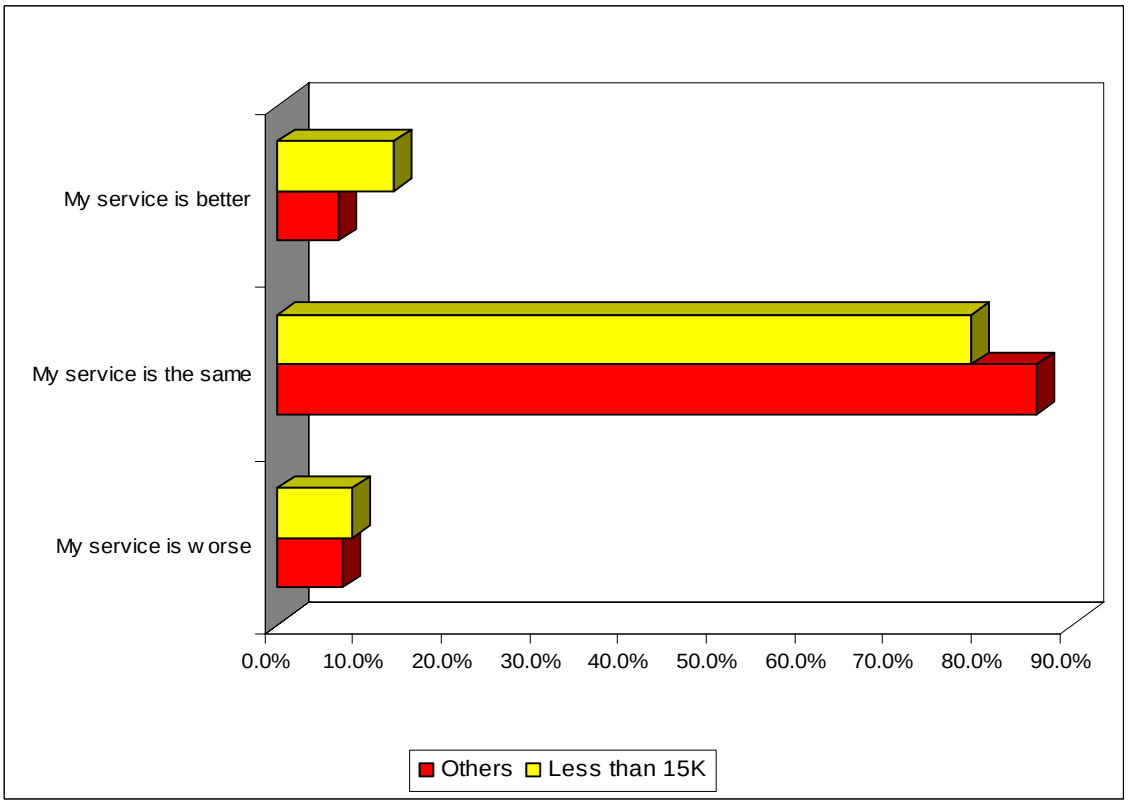

Fig. 15. Impact of competition on perceptions of natural gas service quality.

Source: NRRI/BigResearch, Feb. 2003, n=18,793.

TABLE 9
IMPACT OF COMPETITION ON
PERCEPTIONS OF NATURAL GAS SERVICE QUALITY

Service Quality	Income Less Than $15,000	All Others
Better	13.1%	6.9%
The Same	78.4%	85.8%
Worse	8.5%	7.2%

Source: NRRI/BIGresearch, February 2003, n=18,793

Impact of Choice on Perceptions of Electric Prices

Respondents were asked to assess the impact of competition (choice) in the electric industry on the price of that they pay—more specifically, respondents were asked to assess whether the price is higher, the same or lower. As indicated by Figure 16 and Table 10, almost 10 percent more of the low-income respondents felt that competition in the electric industry had made their electricity prices higher (39.2 percent of low-income consumers vs. 30.6 percent of all others). Almost 10 percent less of the low-income consumers felt that competition had made their electricity prices the same (50.6 percent vs. 59. percent) and an equal number of low-income consumers felt that competition had made electricity prices lower (10.2 percent of low-income consumers vs. 10.4 percent of all others).

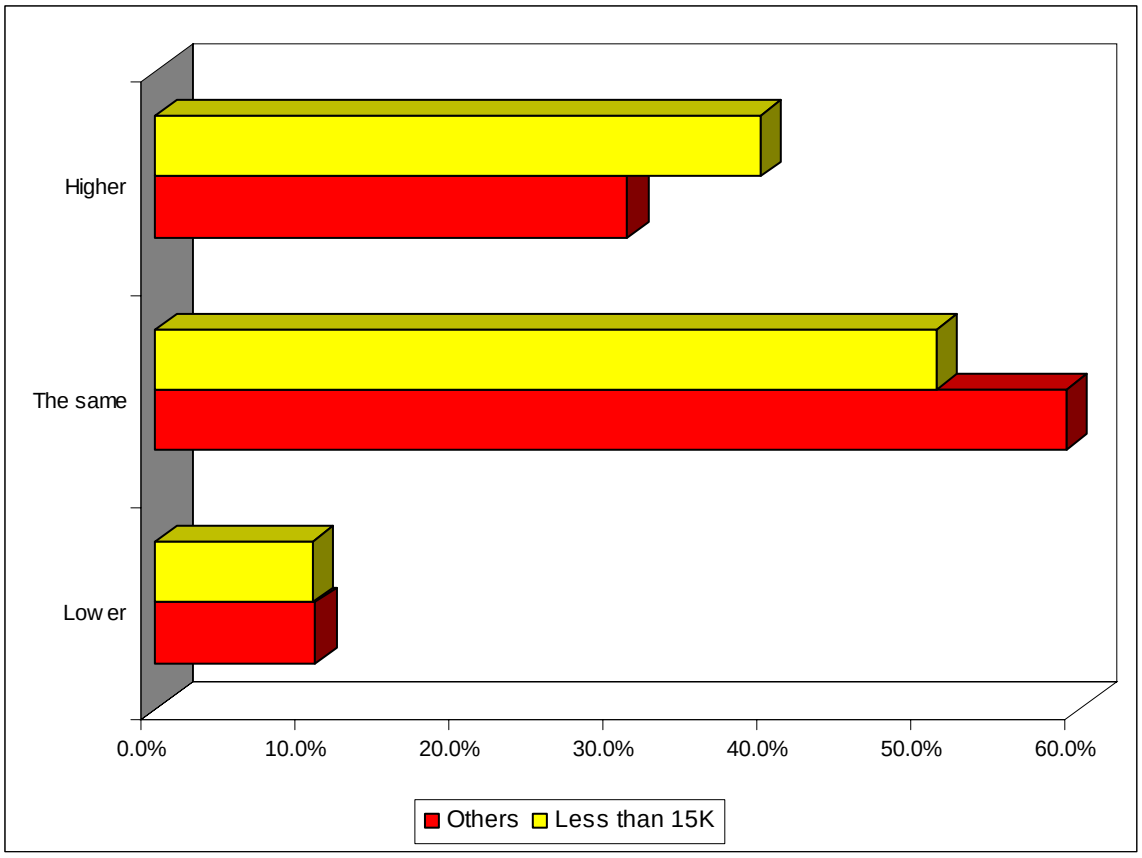

Fig. 16. Impact of competition on perceptions of electric prices.

Source: NRRI/BigResearch, Feb. 2003, n=18,793.

TABLE 10
IMPACT OF COMPETITION ON PERCEPTIONS OF ELECTRIC PRICES

Price	Income Less Than $15,000	All Others
Higher	39.2%	30.6%
The Same	50.6%	59.0%
Lower	10.2%	10.4%

Source: NRRI/BIGresearch, February 2003, n=18,793

Impact of Competition on Perceptions of Natural Gas Prices

Respondents were asked to assess the impact of competition (choice) in the natural gas industry on the price of that they pay—more specifically, respondents were asked to assess whether the price is higher, the same or lower. As indicated by Figure 17 and Table 11, slightly over 10 percent more low-income respondents felt that competition in the natural gas industry had made their electricity prices higher (48.1 percent of low-income consumers vs. 36.8 percent of all others). A 10 percent lower number of low-income consumers felt that competition had made their natural gas prices the same (43.9 percent of low income consumers vs. 53.2 percent of all others) and an almost equal number of low-income consumers felt that competition had made electricity prices lower (8.9 percent of low-income consumers vs. 10.0 percent of all others).

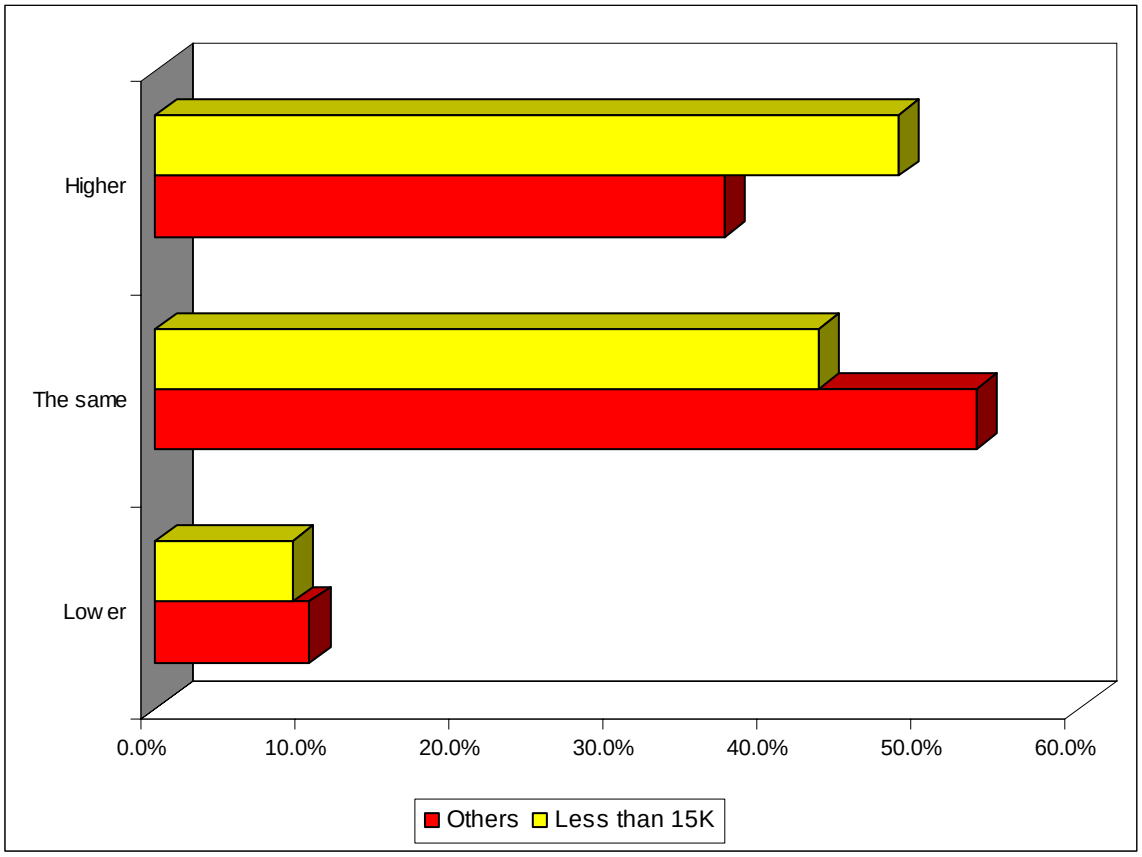

Fig.17. Impact of competition on perceptions of natural gas prices.

Source: NRRI/BigResearch, Feb. 2003, n=18,793.

TABLE 11
IMPACT OF COMPETITION ON
PERCEPTIONS OF NATURAL GAS PRICES

Price	Income Less Than $15,000	All Others
Higher	48.1%	36.8%
The Same	43.9%	53.2%
Lower	8.9%	10.0%

Source: NRRI/BIGresearch, February 2003, n=18,793.

Insights Gleaned from CUBS

The following insights can be gleaned from the results of the NRRI CUBS survey:

Price

- Low-income respondents' perceptions of the price of electric service were fairly similar to that of all other survey respondents. Unsurprisingly, the majority of respondents felt that the price of electric service was high (61.9 percent of low-income respondents and 62.9 percent of all others).
- Low-income respondents' perceptions of the price of natural gas service were also fairly similar to that of all other survey respondents. Just over 60 percent of all respondents felt that the price was high (66.5 percent of low-income respondents and 61.5 percent of all others).

Switching Patterns

- Only a very small percentage of both groups reported switching electricity providers within the past 12 months (3.4 percent of low-income consumers and 2.8 percent of all others)
- Only a very small percentage of both groups reported switching gas providers within the past 12 months (5.1 percent of low-income consumers and 4.3 percent of all others)

Impact of Competition on Service Quality and Price

- Low-income respondents' perceptions of the impact of competition on electric service quality were fairly similar to all others. The majority of respondents felt that their service quality was the same (85.5 percent of low-income consumers and 84.8 percent of all others). With regard to the price of electric service, almost 10 percent more of the low-income respondents felt that competition in the electric industry had made their electricity prices higher (39.2 percent of low-income consumers vs. 30.6 percent of all others).
- Low-income respondents' perceptions of the impact of competition on gas service quality were fairly similar to all others. The majority of respondents felt that their service quality was the same (78.4 percent of the low-income and 85.8 percent of all others). With regard to the price of natural gas service, slightly over 10 percent more low-income consumers felt that competition had made their gas prices higher (48.1 percent of low-income consumers vs. 36.8 percent of all others).

CHAPTER 5

CONCLUSIONS AND INDICATORS OF EFFECTIVE CONSUMER PROTECTION OF LOW-INCOME CONSUMERS

The problem of soaring energy prices is a salient issue for regulators, utilities, consumers--particularly low-income consumers--and consumer advocacy organizations. Indeed the “roller coaster” behavior of natural gas prices has lead to heightened stress for all stakeholders. Research results repeatedly speak to the sober truth that high energy bills have the capability of creating long-term impacts on the physical and emotional health, safety and economic well-being of low-income families. Impacts on health included going without food, medicine, medical or dental care and illness caused by the inability to combat cold or hot temperature homes. Impacts on shelter included utility disconnections, homelessness, eviction, missed rent or mortgage payments and having to move in with others.

The problems associated with utility disconnections can strain all stakeholders not just the consumers who cannot pay their bills. Providing alternatives to disconnection and providing assistance when these alternatives fail, places financial strain on social service agencies. Significant strain can be placed on the function of call centers, at both utilities and state public utility commissions, due to an increase in consumer calls as a result of high energy prices can. Credit and collection activities translate into significant costs for utilities. Energy burdens of all consumers are further compounded by the fact that the soaring amount of revenue owed on residential accounts must either be passed on to shareholders as bad-debt write-off or kept in arrearage accounts and passed on to ratepayers in the form of rate increases.

Perhaps the salient question is not whether or not a greater number of low-income consumers feel that energy prices are high, but what the impact of those energy prices are on the day-to-day lives of low-income consumers. Although results of CUBS research indicates that both groups--low-income consumers and all other consumers--feel that energy prices are high, the difference seen may reflect the impact of high-energy prices pose for low-income consumers. Whereas other consumers may have to tighten their discretionary spending, low-incomes consumers may face disconnections

or have to choose between paying energy bills and omitting or deferring payment for one or more necessities such as rent or medicine. Important questions to consider include the following:

- At what point do increases in energy prices put low-income consumers at risk for disconnection?
- Where is the threshold at which high energy prices place low-income consumers at risk for other losses such as health-risks, financial instability, homelessness etc?
- At what point is assistance, such as LIHEAP, unable to keep low-income consumers from crossing this threshold?

Indicators of Effective Consumer Protection of Low-income Consumers

The data presented in this report indicate that a significant number of low-income consumers have been negatively impacted by high energy prices. As commissions, utilities and other stakeholders attempt to address issues associated with high energy prices, continued and greater attention will need to be paid on the impact of high energy prices on low-income consumers, as well as intervention and mitigation strategies.[79] This concluding section of the report identifies some performance measures that commissions might consider to help low-income consumers mitigate skyrocketing energy prices and prevent utility disconnections.[80] These performance indicators are designed as a discussion template for consumer affairs departments that are developing or reviewing their market monitoring activities, as opposed to a "one-size-fits-all" approach.[81] They are not provided as prescriptive recommendations but as catalysts for discussion.

[79] This is an important issue because uncollected revenue is either passed on to shareholders as bad debt write-off or kept in arrearage accounts and passed on to ratepayers in the form of rate increases.

[80] Adapted from Francine Sevel, *The Consumer Response to Public Utility Competitio*n (NRRI: Columbus, Ohio 2001), 39-50.

[81] The topic of market monitoring is explored in R. Scott Potter's NRRI report,

Basic Data

The following data might be collected on an annual basis for electric, gas and combination utilities.

- The total number of residential customers as of March 31 of each year[82]
- The total number of number of residential accounts in arrears as of March 31 of each year[83]
- The total dollar amount of residential accounts in arrears as of March 31 of each year.
- The total number of terminations for nonpayment from April 1 to March 31 of each year
- The total number of terminations for nonpayment for each calendar year
- What trends can be discerned from analysis of the collections data?
- Are certain demographic, geographic or socio-economic status groups experiencing greater difficulties regarding payment?
- What are the circumstances associated with disconnections? Are circumstances associated with extreme weather conditions or economic conditions?

Impact of Energy Assistance as a Mitigation Strategy

Consumers who receive energy assistance might be surveyed to determine the following impacts of utility disconnections.

Transparency, Cooperation and Innovation: Electricity Market Monitoring Issues for State Regulators (NRRI: Columbus, Ohio 2004)available at: http://www.nrri.ohio-state.edu/phpss113/search.php?select=Publications&query=all

[82] This date was chosen as this is the date that NARUC is using for national data collections. NARUC is collecting this information because it is vital for the assessment of the sufficiency of LIHEAP funding, as well as a baseline for addressing the issues of alternatives to disconnection. Without solid national information regarding collections and disconnections it is impossible to accurately assess the severity of the problem or the effectiveness of public policy regarding alternatives to disconnection.

[83] A residential account that is at least 30 days overdue. Accounts in arrears would include all accounts that are overdue including accounts with a payment agreement. This category would not include budget customers if they are current with their budget payments.

- What are the economic consequences of not being able to pay energy bills?
- What are the sociological consequences of not being able to pay energy bills?
- What are the health and psychological consequences of not being able to pay energy bills?

Consequences of Disconnections

Consumers who have been disconnected might be surveyed to determine the following impacts of utility disconnections.

- What are the economic consequences of not being able to pay energy bills?
- What are the sociological consequences of not being able to pay energy bills?
- What are the health and psychological consequences of not being able to pay energy bills?

Mitigation Strategies Used by Consumers Whose Service was Disconnected

Consumers who have been disconnected might be surveyed to determine what if any mitigation strategies were used in an attempt to prevent disconnection.

- What percentage of disconnected consumers received LIHEAP?
- What percentage of disconnected consumers received other utility assistance in addition to LIHEAP?
- What percentage of disconnected consumers received other financial assistance such as welfare, Medicaid, free-medical care, housing subsidies, etc.
- What percentage of disconnected consumers received assistance, and/or advice, from social service agencies prior to being disconnected?
- What other financial strategies were used by consumers to prevent disconnection?

Consumer Education

- Where do low-income consumers go for information regarding alternatives to disconnection?
- What type of consumer education materials regarding alternatives to disconnection do low-income consumers prefer? i.e. utility bill inserts, posters in public places, etc
- Where do low-income consumers go for information regarding energy conservation?
- What type of consumer education materials regarding energy conservation do low-income consumers prefer? i.e. utility bill inserts, posters in public places, etc

Energy Conservation

- What are the strategies used by low-income consumers to reduce their energy bills?
- What are the barriers to use of strategies to reduce energy bills? i.e. lack of money to purchase energy savings supplies?
- What are negative consequences of uses of energy saving strategies? i.e. illness as a result of turning down the thermostat too low*?*

Complaint Statistics Regarding Energy Prices, Disconnections and Related Issues

- What are the trends that can be discerned through the monitoring of complaint data?
- Are certain types of complaints more prevalent?
- Do certain demographic, geographic or socio-economic status groups have higher complaint thresholds?
- Are there specific companies where trends are more apparent?

Company Resolution Mechanisms Regarding Late Payments, Disconnections and Related Issues

- What is the percentage of customers who are satisfied/dissatisfied with the company's resolution of the problem?
- What is the percentage of customers who are satisfied/dissatisfied with the knowledge of the company representative during the resolution process?
- Are all customers treated equally during the complaint resolution process?
- Are there certain demographic, geographic or socio-economic groups of customers who experience more problems with the resolution process?

Indeed data collection can play a vital role in combating the problem of utility disconnections and ensuring that all consumers are able to reap the benefits of safe, affordable utility service. The addition of these market indicators to traditional commission market indicators will help commissions to develop new models of market monitoring. The addition of the low-income consumer perspective to traditional commission market monitoring will help to ensure that all customer classes are adequately protected.

The problem of utility disconnections is a large-scale societal problem that impacts many stakeholders including low-income consumers, social service and government agencies, utilities and state public utility commissions, as well as other consumer advocacy groups. Hopefully, this report has raised awareness of the complexity of the issues associated with preventing utility disconnections. In the future, it will be important that all stakeholder groups work collaboratively to address alternatives to utility disconnections.

APPENDIX

METHODOLOGY OF THE NRRI CONSUMER UTILITY BENCHMARK SURVEY

The data for NRRI's Consumer Utility Benchmark Survey (CUBS) was gathered by BIGresearch, a consumer market intelligence firm that provides unique consumer insights that are gathered online utilizing very large sample sizes. BIGresearch's syndicated *Consumer Intentions and Actions* survey monitors the pulse of more than 7,000 consumers each month providing insights for identifying opportunities in today's competitive and changing marketplace. http://www.bigresearch.com/.

BIGresearch collects all responses online from the largest online community of over 60 million people. BIGresearch surveys are anonymous, self administered and free of interviewer bias. Questionnaires are designed to be completed very quickly, usually in less than 5 minutes. BIGresearch's collection method is an excellent example of the application of human factors engineering principles to eliminate barriers to consumer participation. It's easy and fun to participate.

A computer controlled system tied to market realities ensures more than adequate representation of all consumer groups defined by age, sex, income, ethnic composition and geographic distribution. BIGresearch takes 14 samples simultaneously - seven age groups for males and seven age groups for females. These fourteen large samples are woven together for a huge market sample usually between 5,000 and 10,000. Samples of this size allow for detailed cross-tabulation and for a more accurate measurement of the market. Each cross-tabulation is dynamically balanced, through computer intensive statistical procedures, to known market realities. The benefits of this are:

- The collection of "mega" samples to insure representation of all types of consumer groups.
- The utilization of 14 sampling frames with short age spans, (i.e. Males 14-17 yrs., 18-24 yrs, etc.) to insure far greater homogeneity within groups.
- Market balancing with a computer model driven by known, real world, information, which adjusts the samples to the marketplace.
- The short (unannounced) time period over which the data are collected precludes merchants and advertisers from modifying behavior to influence results.

- As an online research company, BIGresearch adheres to a survey standards policy which is based upon a "well posed random sample", and is weighted to reflect the U.S. population. A similar policy has been adopted by others such as American Demographics.

Ongoing technical review process of data collection methodology and BIGresearch's application of computer intensive statistics to analyze and manage the data.

- The gender distribution of online uses is identical to that of the general population (as reported by the US Census)
- The marital status along all dimensions is identical to the general population
- The age distributions of online individuals is also approaching that of the general population