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Home Energy Insecurity in Missouri

NOTE TO READERS

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MISSOURI LOW-INCOME HOUSEHOLDS FOUND TO FACE CRISIS ENERGY SITUATIONS WHEN MEASURED BY NEW HOME ENERGY INSECURITY SCALE

Unaffordable home energy is a fact of life for more than a quarter million Missouri households. These households face a daily struggle to cope with energy poverty—an excessive energy cost burden that frequently affects their health and well-being.

For most of these Missourians, the increasingly high cost of heating and cooling their homes is a hardship making their daily lives a challenge. A recent report prepared by FSC for the National Low-Income Energy Consortium (NLIEC) documents the severity of this hardship. According to NLIEC, “the results are both clear and disheartening.”

FSC reported in its June 2004 publication, titled *Paid but Unaffordable: The Consequences of Energy Poverty in Missouri*, that unaffordable home energy has a variety of serious impacts on low-income households already struggling to meet other bills. FSC found that unaffordability of home energy affects the full spectrum of a household's physical, economic and social well-being.

In addition to threatening home energy service, energy poverty contributes substantially to hunger, inadequate housing, educational underachievement, health and safety dangers, and the inability to retain employment.

Hunger

Low-income energy advocates often state that no one should have to choose between heating and eating. These statements are by no means overly dramatic. Nearly half of the survey

population (46%) went without food in order to pay home energy bills.

Energy-bill induced hunger was found to occur throughout the range of energy burdens and demographic groups. Wage earners, commonly referred to as the “working poor,” had the highest incidence of going without food in order to have enough money to pay home energy bills.

Health Care

In order to pay their energy bills, many low-income Missourians go without prescribed medicines and needed medical care.

Skipping medicines to save money to pay home energy bills is common within the survey population. Nearly half of the respondents (45%) failed to take their medicines, or they took less medicine than their doctors prescribed, in order to pay their home energy bill.

Forgoing prescribed medicines or taking less than the prescribed dosage occurred most often in the extreme poverty levels. More than 40% of those who took such measures had incomes below 50% of the federal poverty level, while three-quarters of those who did had incomes below 100% of the poverty level.

Low-income Missourians also went without seeing doctors and dentists altogether because of unaffordable home energy bills. Public assistance recipients and households with unemployed persons had the highest incidence of forgoing medical care.

Housing

Housing is intended to protect people from the elements. But when a home becomes uninhabitable because the resident cannot afford to heat or cool it, the housing is not performing one of its most basic functions.

Unaffordable energy bills unquestionably result in some households being denied the use of parts of their homes during hot or cold weather. More

than 60% of those surveyed said they closed off one or more rooms because they could not afford to heat or cool the space.

In addition, unaffordable home energy bills forced many low-income households to abandon their homes altogether for all or parts of a day because they could not stay warm or cool in their homes.

Education

Energy poverty has an adverse effect on children’s educational achievement. Unaffordable home energy bills were found to be a substantial contributor to the transience of low-income households with children. This frequent mobility, in turn, harms educational achievement.

When students are frequently uprooted, they have difficulty keeping pace with the educational curriculum. In addition, teachers have more difficulty in assessing the knowledge, strengths and weaknesses of frequently mobile students.

Third grade students who have changed schools frequently are two-and-a-half times more likely to repeat a grade than third graders who have never changed schools. Highly transient students are more likely to be below grade level in both math and reading.

In addition to this energy-bill induced frequent mobility, energy poverty impedes the ability of households to provide basic educational supplies for their children. Of the 158 frequent-mover households responding to a question about school books and supplies, 35% did not buy school books or supplies for their children in order to have money to pay their home energy bills.

Employment

Transience also has an impact on employment, particularly among low-wage workers. Transience for low-wage workers reduces the

wages earned by reducing the hours worked, as households seek out new housing. This occurs even if the worker succeeds in keeping his or her job after the move.

Many employment problems can be traced to unaffordable home energy. Nearly one-in-six frequent-mover households cited an energy-related reason as the primary reason for their most recent move.

Home Energy Insecurity Scale

The extent of the problems of energy poverty was measured in Missouri using the Home Energy Insecurity Scale first developed by FSC for the U.S. Department of Health and Human Services (HHS). The objective of the Home Energy Insecurity Scale is to capture the multiple aspects of home energy unaffordability.

The scale represents a substantive improvement in measuring the outcomes generated by low-income energy assistance programs. As FSC indicated to HHS, administrators of such programs have long struggled to develop a mechanism to capture the many facets of home energy unaffordability.

Some efforts to measure energy assistance outcomes have focused on lowering home energy burdens. (A household's "energy burden" is the household bill divided by the household's gross income.) This process, however, does not capture the circumstances of a household for whom the receipt of energy assistance results in an *increase* in the home energy burden because he or she is no longer required to cut off all rooms of the home but one.

Some efforts to measure energy assistance outcomes have focused on the nonpayment of home energy bills (as well as the disconnection of service and other collection-related problems). This process, however, does not capture the circumstances of a customer that pays his or her bill, but reduces spending on household necessities for food or medicine in order to do so.

Some efforts have focused on reductions in energy consumption. This process, however, does not capture the circumstances of a household whose energy unaffordability problems result from very low incomes (even though usage is very low as well).

The proposed Home Energy Insecurity Scale allows the program manager to capture all aspects of low-income energy affordability.

The Home Energy Insecurity Scale developed by FSC uses five thresholds for measuring the energy self-sufficiency of a household:

- A ***thriving*** household has achieved generally accepted standards of well-being without outside assistance or financial strain.
- A ***capable*** household is secure, even though not having achieved the full range of generally accepted standards of well-being.
- A ***stable*** household does not face significant threats and is unlikely to be in immediate crisis.
- A ***vulnerable*** household is not in immediate danger, but may be avoiding danger only through temporary or inappropriate solutions.
- An ***in-crisis*** household faces immediate needs that threaten the household's physical and/or emotional well-being.

Missouri low-income households were found to be ***In-Crisis*** if they frequently were denied the full use of their home in hot or cold weather; frequently were called upon to use dangerous methods of space heating; frequently were called upon to forgo basic household necessities in order to pay their home energy bill; or frequently were subject to the disconnection or discontinuance of service.

Missouri's low-income households were found to be ***Vulnerable*** if they frequently did not have enough money to pay their home energy bill when it came due without someone's help;

frequently did not pay their home energy bill when it came due, or received notices of service disconnections; frequently had to reduce energy use to uncomfortable or inconvenient levels, or had to forgo the use of some part of their home because they could not afford to heat or cool it; occasionally experienced the actual disconnection of service, or occasionally were forced to use their kitchen stove or oven as a source of space heating; or occasionally went without food, health care, or medicine in order to pay their home energy bill.

Missouri's low-income households were found to be Stable if they frequently could not afford to heat or cool their home to a comfortable temperature or could not use their hot water or appliances as much as they wished to; occasionally left home for all or part of the day because they could not afford to either heat or cool their home, or occasionally turned off their hot water heater because there was not enough money to pay the home energy bill; frequently worried about whether their home energy bill would become due before they could get money to pay it; or occasionally received a warning that service would be disconnected or discontinued due to nonpayment without having service actually terminated.

Missouri's low-income households were found Capable if they: no more than occasionally worried about whether their home energy bill would become due without having money to pay for it; no more than occasionally either did not pay their home energy bill due to a lack of money or had their energy bill become due without having money to pay it absent someone's help; no more than occasionally had to adjust their use of heating, cooling, hot water, or appliances because they did not have money to pay the energy bill; or no more than occasionally had to forgo the use of part of their home because they could not afford to heat or cool it.

A Missouri low-income household was found to be Thriving if they never experienced one of the energy insecurity indicators. A Thriving

household never worried about whether its bill would become due without having money to pay it; never experienced nonpayment of a bill due to a lack of funds, and never needed to seek outside assistance to help pay a bill which became due; never experienced the need to reduce consumption or reduce expenditures on household necessities in order to have money to pay its home energy bills.

Given these definitions and indicators, FSC found that the Missouri survey respondents fell into the following Home Energy Insecurity Scale classifications:

- In-Crisis: 49.1%
- Vulnerable: 45.5%
- Stable: 3.0%
- Capable: 2.0%
- Thriving: 0.4%

FSC's complete Missouri *Paid but Unaffordable* report, including the underlying Home Energy Insecurity Scale survey, can be obtained by sending a request to:

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A copy of the original report for the U.S. Department of Health and Human Services (HHS) federal LIHEAP office, titled *Measuring the Outcomes of Low-Income Energy assistance Programs through a Home Energy Insecurity Scale*, can be obtained as well.

Fisher, Sheehan and Colton, Public Finance and General Economics (FSC) is a research and consulting firm with offices in Belmont (MA), Scappoose (OR), and Iowa City (IA).

FSC specializes in providing economic, financial and regulatory consulting. The areas in which *FSC* has worked include infrastructure financing, public enterprise planning and development, natural resource economics, community economic development, telecommunications, public sector labor economics, planning and zoning, regulatory economics, energy law and economics, fair housing, and public welfare policy.
