

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking Regarding
Policies, Procedures and Rules for the
Low Income Energy Efficiency Program
of California's Energy Utilities.

Rulemaking 07-01-042
(Filed January 25, 2007)

**COMMENTS ON LIEE PROGRAM OBJECTIVES AND GOALS
BY A WORLD INSTITUTE FOR A
SUSTAINABLE HUMANITY**

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COMMENTS BY A WORLD INSTITUTE FOR A SUSTAINABLE HUMANITY ON LIEE PROGRAM OBJECTIVES AND GOALS ADDRESSED IN MARCH WORKSHOP

I. INTRODUCTION

Pursuant to the Scoping Ruling for the Commission’s Rulemaking on the Low Income Energy Efficiency (“LIEE”) Programs of California’s Energy Utilities issued on March 28, A World Institute for a Sustainable Humanity (“A W.I.S.H.”) files Opening Comments on LIEE program objectives and goals in this proceeding.

A W.I.S.H. appreciates that this rulemaking presents an opportunity to review and enhance existing low income energy efficiency programs and invites paradigm shifts and new thinking in its attempt to improve on California’s already ambitious and successful low income programs. A W.I.S.H.’s perspective combines expertise in sustainability coupled with innovative program approaches and use of community based organizations and others to leverage weatherization dollars and programs.

As it will elucidate further, A W.I.S.H. believes that sustainability necessarily involves linkages and commonalities with: (1) low income energy efficiency as a resource program; (2) utilization of low income communities and the network of community service providers to deliver programs, outreach and leverage resources; (3) equity for all low-income customers including master-metered customers and renters ; (4) reduction in greenhouse gases and promotion of overall sustainability and environmental justice; (5) the health, comfort and welfare of low-income energy customers; and (6) inclusion of new and green technologies and efforts within the low income energy efficiency program, including coordination with the California Solar Initiative, water conservation, and the non-low income energy efficiency program.

In other words, A W.I.S.H sees this opportunity as an unprecedented occasion to revisit certain assumptions and preconceptions about the LIEE program, while bringing new technologies and best practices from other jurisdictions to bear. While we believe that the Commission and many other parties will agree that an increase in the low income weatherization budget may be required, any budgetary increase should be accompanied by program revisions that promote important resource, technological, health and comfort, and societal goals, including better linkages with other program dollars and efforts to promote sustainability. A W.I.S.H. is already collaborating with the network of community service providers and looks forward to continuing dialogue with utilities, other non-profits, those representing master-metered customers, State entities, and other parties.

Before responding to specific questions posed by the Commission, A W.I.S.H. urges a more holistic approach to low income weatherization and sustainability in California. This paradigm extends to the inclusion of new and green technologies, partnering with low-income communities, reducing greenhouse gases, providing equitable programs to renters and master-metered customers, leveraging weatherization dollars, coordinating with the Solar Initiative and existing energy efficiency and water efforts, promoting health and safety of low-income households, and integrating environmental justice and pollution control with strategies for hard-to-reach eligible populations.

I. A W. I. S. H. RESPONDS TO QUESTIONS REGARDING BROAD PROGRAM OBJECTIVES FOR LIEE

A W.I.S.H. agrees that affordability, reducing the energy burden of low income customers, equity for low income ratepayers, and safety and comfort are all critical objectives for the LIEE program. While we agree that system reliability and cost-effectiveness are important goals, the tests used for low income customers may necessarily have to vary from those employed with other energy efficiency programs. A W.I.S.H. strongly supports the inclusion of environmental quality and reduction of greenhouse gases as an objective and believes that the Commission has a unique opportunity to revamp and modernize traditional weatherization programs with inclusion of these considerations. We elaborate below on each topic.

A. Affordability

Energy affordability is a critical issue for low income households, and, as such, is an entirely appropriate program objective for LIEE. Low income households typically spend a disproportionate share of their household budget to cover essential energy costs, frequently several times the percentage the average household spends. Because low income households do want to pay their bills and because paying their utility bill is often a condition of having a place to live, paying energy bills frequently means doing without some other essential item. While this may mean not having adequate space conditioning for health, safety and comfort, it could also mean not filling a prescription or skipping meals. When, as in California, the cost of housing is high, utility bills can truly be the straw that breaks the camel's back for low income residents.

Bill assistance programs, such as California Alternate Rates for Energy or CARE, make admirable attempts to alleviate this problem, but their solutions are temporary and require repeated infusions of funds, which, in turn, cost all ratepayers. Energy efficiency measures, in contrast, usually last for many years – sometimes up to thirty – reducing the amount of energy a household needs for an adequate quality of life and likely helping more than one family because of the relative permanence of low income housing stock. Renewable energy applications, such as a solar domestic hot water system or photovoltaics (“PV”), can have a similar impact. In addition, measures which address the need for energy at highest cost and peak times, such as insulation which reduces heating or cooling load, or PV systems which feed the grid during summer high use times, have a system benefit by lowering the overall peak and reliance on the most expensive generation resources. In this way, addressing affordability for low income households makes energy more affordable for all.

B. Reduction of Energy Burden for Low Income Customers

This, too, is a very worthwhile objective. It goes hand in hand with affordability. However, one should remember that for many households, particularly seniors on fixed incomes, even a low energy burden may still be unaffordable. The energy burden serves better as an indicator: that is, reducing energy burden can demonstrate whether we are moving in the right direction, with affordable energy services as the ultimate goal. In that sense, it is a worthwhile outcome, but not the most essential one.

C. Equity for Low Income Customers

A W.I.S.H. sees at least two ways to approach the equity objective. First, are there adequately funded programs that effectively address the needs of low income households? It is not uncommon for low income energy efficiency programs to be funded at a lower level than other energy efficiency programs because they do not get the same savings for dollar invested. Still, bill-paying low income customers, and there are many who sacrifice other essential needs to pay utility bills, are paying to support utility energy efficiency programs through rates. The bulk of these programs go to benefit customers far better able to afford the very services that the utility is subsidizing. It is

only fair that there be well-funded programs to address energy affordability for low income households by making their energy use more efficient.

Second, the overall benefit analysis for equity should include leveraged funds. It is important to realize that the utility investment in low income dwellings is frequently just one of several resources that needs to be brought to bear to make substandard housing habitable, bring it up to code, and make it a safe and healthy place to live. Too often the additional funds that are, or could be leveraged, are not considered when the overall benefit of the investment is assessed. In Washington State and Oregon, for example, the average weatherization costs \$5000 and is leveraged with funds from other entities apart from the utility to achieve maximum benefit; in California, the average weatherization cost is \$ 1500 according to analyses provided in the Solar Initiative. Thus, the Commission's stated goal of making every low income home energy efficient by 2015 must necessarily include measures that make the home habitable, safe and healthy, as well as new renewable technologies and efficient appliances. This can be achieved when LIEE is combined and leveraged with LIHEAP, Department of Energy funds, Department of Agriculture, and other sources, including private, in a creative fashion.¹

D. Safety and Comfort

Safety is an entirely appropriate program objective for LIEE. Healthy and safe housing should be a cornerstone of the LIEE program. One may achieve lower energy consumption without health and safety standards – a home without a functioning heating system, for example, -- but A W.I.S.H. rejects this approach as an unacceptable social condition and cost. Moreover, it is not energy *efficient*.

A recent, comprehensive study released by the Boston University School of Medicine focused on the child health impacts of rising energy costs and inadequate heat.² The study addressed the consequences of alternative heat sources, such as un-vented portable space heaters, unhealthy housing conditions and other low income related issues. It found, among other things, that families were more vulnerable to hunger in the winter and spring due to energy unaffordability and that there was increased malnutrition in winter months. Children in low income households that did not receive LIHEAP (Low Income Home Energy Assistance Program) were 30% more likely to admitted to a hospital than LIHEAP recipient children and 20% more likely to be nutritionally at risk for growth problems. Other related health issues in the findings were cognitive and developmental deficits.

The study further noted the linkage between energy burden and poor school performance. Twenty two percent of LIHEAP households in the Northeast use kitchen stoves for heat because they cannot afford to pay energy bills. The Center for Disease Control stated that, “[h]igh oil and gas prices and power outages during the winter months can contribute to consumer use of improperly vented heating sources.” Thus, there are significant health and safety risks related to home energy policies. The United States Fire Administration, for example, reports that winter fires account for 40% of residential fire injuries and 50% of residential fatalities.³

¹ For example, the Community Action Agency of San Mateo County is currently involved with a tankless solar water heater pilot project in which Pacific Gas & Electric funds are combined with state funds from a petroleum violators' escrow account to install the solar devices. Clearly, much more of this can and should be done.

² Smith, “*Unhealthy Consequences: Energy Costs and Child Health*,” Boston University School of Medicine, The Medical Legal Partnership for Children.

³ Ibid.

Certainly, the same concerns for heating hold true for adequate cooling for seniors, the disabled, and children in many of California's inland and desert areas where summer temperatures present serious health risks.

Suffice it to say that LIEE reduces energy costs for households, thus alleviating arrearages. Arrearages, according to the Boston University study, affect housing instability, medical problems and lack of treatment, adverse mental health impacts and adverse educational outcomes for children. Obvious health impacts of substandard housing include, but are not limited to, insufficient heat or running water, exposed wires and uncovered radiators, overcrowding, increased asthma, fires, use of space heaters, carbon monoxide exposure and increased infectious diseases. Average hospital costs for carbon monoxide poisoning are \$10,728 and for asthma and bronchitis \$7,386.⁴

LIEE, when functioning at its maximum potential is a tremendous resource for alleviating health and safety concerns. At present, A W.I.S.H. believes that California's LIEE program does not approach its maximum potential, but that the use of best practices such as blower door technology and installation of all energy efficient retrofit measures can achieve this goal. Additionally, LIEE funds should be leveraged. Comfort for low income households can also be enhanced through best practices. Since many low income households are overcrowded due to economic hardship, rooms that are closed off or have no space conditioning source limit use of household space. Again, comfort, health and safety are interrelated and are important objectives of any LIEE program.

E. Energy System Reliability and Cost-Effectiveness

LIEE's overall contribution in reducing consumption may suffer in comparison to commercial and industrial programs where there are huge savings to be gained by improving the efficiency of processes that use large amounts of energy. However, LIEE, especially when combined with other housing improvement funds, not only can elevate housing stock from a substandard category to an acceptable one, but also makes the home a more reliable and efficient consumer of energy. A W.I.S.H. advocates for a societal cost test for LIEE different from a total resource cost test that may be more appropriate for other energy efficiency programs. Again, there are societal considerations such as promoting health, comfort and safety which cannot be fully measured without a cost test that takes these outcomes into effect. Also, A W.I.S.H. believes that discovery and perhaps the KEMA needs assessment will show that many low income households, especially large ones, are conservationist because of lack of resources to spend on energy. Thus, a strict utility cost test would penalize the very customers who are most energy efficient⁵.

F. Environmental Quality and Reduction of Greenhouse Gases

A W.I.S.H. believes that the impacts of reduced greenhouse gases should be appropriately reflected in any assessment of program benefits. The holistic approach to LIEE that A W.I.S.H. advocates recognizes that low income energy efficiency, health and safety and environmental quality and reduction of greenhouse gases are inextricably intertwined. Thus, it makes no sense for California to pursue ambitious solar and alternative fuel solutions overall while ignoring greenhouse gases and new environmentally sensitive technologies in the homes of California's poor. The Solar Initiative is a positive step forward, but the LIEE program itself should begin incorporating technological advances into its measures, as permitted by Public Utilities Code Section 2790(c). The more LIEE measures are leveraged with other program dollars, such as LIHEAP, Department

⁴ Ibid.

⁵ Discovery produced in the Commission's baseline proceeding, for example, demonstrated that large Latino and Asian families, in particular, were conservationist, but exceeded baseline amounts because of household size. See, Decision 04-02-057.

of Energy and other funds including private, the more effective and cost-efficient the program can be.

II. MULTIPLE AND COMPETING LIEE OBJECTIVES CAN BE HARMONIZED AND PRIORITIZED AROUND SUSTAINABILITY

By using sustainability as a governing principle, the Commission will be able to balance and harmonize multiple and sometimes competing objectives to ensure that the resulting whole best promotes the overall societal good. Thus, a sustainability perspective ties together greenhouse gases, system reliability, reduced carbon impacts, affordability, health and safety, energy savings, and other objectives. At the same time, it recognizes evolving technologies and adapts LIEE practices and measures to California's energy needs and demographics. Best practices, a holistic approach to weatherization employing all feasible measures and energy education, and integration of LIEE funding sources with others will achieve maximum outcomes for the low income energy efficiency program.

III. ENSURING ENERGY EFFICIENCY FOR ALL LOW INCOME CUSTOMERS IS AN APPROPRIATE GOAL

A. W.I.S.H. fully endorses the Commission goal of ensuring energy efficient residences for every low income customer by 2015. Obviously, to achieve this goal, the Commission will need to significantly expand the LIEE budget, leverage dollars with other weatherization and home repair programs, and include the network of state and local agencies, community based organizations and others for effective program funding and delivery. Public Utilities Code Sections 327 (a)(1) and (2) specifically provide for fund leveraging and coordinating the LIEE program with other entities. Sections 327 (a)(3) and (4) further require maximization of eligible participants and encourage local employment and job training.

The Commission's goal, then, should be a mobilizing force to integrate LIEE with the Solar Initiative, CARE delivery, water conservation, broader energy efficiency goals and renewable initiatives with maximum program delivery by 2015. Community needs, such as jobs training, economic development, healthier communities, and environmental justice will be natural outcomes of the Commission's LIEE goal, especially when combined with the network of community service providers who can train low income individuals in the delivery of efficacious energy efficiency programs in low income communities. Sections 327 (a), 382 (b) and (c) , and 381.5 all contemplate energy efficient housing to promote energy affordability, strengthen the network of community service providers, enhance job skill development, and leverage funds to maximize participation. Read collectively, these code provisions are in perfect unison with the Commission's LIEE goal, not to mention the State's objective of reducing greenhouse gases and improving the environment overall.

IV. ENERGY EFFICIENCY SHOULD BE DEFINED IN THE BROADEST TERMS

As A W.I.S.H. has asserted throughout, "energy efficiency" should not be defined solely in terms of energy savings, though the latter is a key component of energy efficiency. The definition should encompass health, safety, societal goals, reduction of greenhouse gases, comfort, maximizing program impacts and dollars through leveraging, achieving greater environmental justice, and reducing hardships for low income customers.⁶

⁶ It should be remembered that most power plants, especially the most polluting peaker plants, are located in low income communities where residents suffer the ill effects.

V. THE PROGRAM GOAL SHOULD BE APPLIED TO ALL ELEMENTS

In keeping with the "whole house" approach that A W.I.S.H. believes is necessary for program efficaciousness, the Commission goal on energy efficiency should be applied to all program elements. The whole house approach addresses non-energy benefits along with societal cost tests. It further recognizes new technologies along with the traditional measures listed in Public Utilities Code Section 2790(b)(1) and could include non-toxic weatherization materials, innovative solar and other measures, and new strategies to maximize indoor air quality as well as improve energy efficiency.

VI. THE COMMISSION SHOULD RECOGNIZE OTHER BROAD PROGRAM GOALS

A W.I.S.H. reiterates that other broad program goals should include integrating LIEE dollars with other funding sources, be they LIHEAP, Department of Energy or others. The LIEE program should necessarily recognize the benefits of health and safety and reduction of hardship in measure installation. All feasible measures should be done each time a home is weatherized, especially since most homes cannot be re-weatherized for a number of years (up to ten) once treated. Thus, the sometimes extant practice of installing several compact florescent bulbs and a low flow shower head and deeming a house "weatherized" must be discouraged, unless compelling reasons so dictate. This practice promotes cream-skimming by installers, but does little to help the low income ratepayer.⁷ It goes without saying that installation of full measures in a home avoids multiple trips, duplication of services, start up costs associated with weatherization, and reduces carbon generated by transportation. Water efficiency retrofits, all possible natural gas and electric measures, and home repair through utility and other funding sources should be attendant Commission LIEE goals.

Commission goals should further reflect the long-awaited KEMA needs assessment, as required by statute. Once overall need is established, funding levels and participation goals should be reviewed and revisited. Reduction of energy burden for low income households and affordability are concomitant goals that the Commission should endorse, as well as necessary outreach strategies for hard-to-reach poor populations akin to the successful rapid deployment efforts. Finally, Commission goals should encompass maximizing program dollars through leveraging and reducing greenhouse gases through best practices in energy efficiency installation and retrofits from around the country.

VII. OTHER QUESTIONS THAT THE COMMISSION SHOULD ADDRESS

Decision 06-12-038 stated the Commission's commitment to developing strategic goals for the LIEE program and tailoring budgets accordingly. The KEMA needs assessment, along with Census and other data, should form the predicate for goal-based budgeting. Key questions that will need to be addressed in that context include: the definition of the universe of LIEE participants; if criteria for program participation should be changed or clarified; how program priorities should be set; what populations to target first based on program priorities; how priorities should be reflected in utility budgets and program goals; and what new measures should be considered in keeping with new technologies, greenhouse gas reduction efforts, and coordination with the Solar Initiative.

Finally, A W.I.S.H. endorses equity concerns, including renters and master-metered customers access to the LIEE program, and believes that the Commission should fully address

⁷ A W.I.S.H. agrees with the statement in Decision 06-12-038 at pp. 6 – 7 (Framework for Considering the LIEE and CARE Programs and Budgets) with respect to providing benefits to the largest number of households. However, if by funding the most cost-effective measures first, the Decision is endorsing cream-skimming or installation of cfl's over more meaningful measures, then we strongly believe this framework should be reconsidered since it will not reach the State's goals on energy efficiency and carbon reduction, nor the Commission's goal of weatherized homes for low-income customers by 2015. That Decision, laudably, left open the option of exploring cost-benefit issues and program elements in the coming year.

attendant issues, including outreach to hard-to-reach populations. The workshop on AB 2104 was a good step forward in terms of master-metered and mobile home park customers.

VIII. CRITERIA THE COMMISSISON SHOULD CONSIDER TO MEET ITS GOAL

We reiterate that when low income energy funds are integrated, as is the case in Washington State and Oregon, much more can be accomplished in terms of maximizing weatherization and other positive outcomes, including reduction of greenhouse gases, system reliability, health, safety and comfort. Moreover, for the Solar Initiative and other new technologies to work, homes should first be weatherized with all feasible measures. Equity and reaching hard-to-reach populations are other important criteria for Commission consideration, including renters and master-metered customers. Finally, A W.I.S.H. points to the successful efforts under rapid deployment as outreach models, particularly for language minority and the most vulnerable, to achieve maximum program penetration.

CONCLUSION

A W.I.S.H submits that the opportunity to significantly broaden and improve energy efficiency delivery to low income households in California should be seized by the Commission. Cost-effective LIEE program delivery should be reconciled with societal tests that recognize new renewable technologies, reduction in greenhouse gases, safety and comfort, enhanced measures, reduction in hardship, overall energy savings, environmental justice, and best practices from around the country. The involvement of the network of community service providers, community based organizations and others is also critical for leveraging dollars and program success, including outreach and education, as the Public Utilities Code specifically envisions. Pending the needs assessment and program review, the LIEE has been somewhat of a stepchild to the CARE program, which set ambitious penetration goals and outreach activities. Now is the time to act on the LIEE; California can and should be a national model on low income energy efficiency.

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Respectfully submitted,

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