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### NOTE TO READERS

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### COMMERCIAL AND INDUSTRIAL CUSTOMERS SHOULD HELP PAY FOR LOW-INCOME PROGRAM

When state legislatures and public utility commissions adopt programs to redress the unaffordability of home energy, the question of which other customers may legitimately be called upon to pay for such programs presents itself.

The analysis below considers the reasons why *all* customer classes should bear some responsibility for a share of any charge that is imposed in support of affordability programs. These charges may appear in the form of a system benefit charge imposed on all customer classes by regulators or legislators. The charges may alternatively be imposed by the allocation of the costs of such programs over the rates of all customer classes.

The discussion below separately considers two rationales for spreading the costs of affordability programs over all customer classes:

1. The need for all customer classes to pay for "public goods" from which they derive benefits.
2. The need for all customer classes to contribute to the resolution of inability-to-pay problems to which they, themselves, contribute.

#### Payment for Public Goods

One well-accepted tenet of utility ratemaking is that certain expenses incurred by a public utility are for "public goods." Due to their nature, all customers receive benefits from public goods and, accordingly, the costs of such goods are spread over all customer classes. Each end user makes a financial contribution to the utility's delivery of public goods.

The “public goods” doctrine is applied in a variety of settings as a justification to spread designated utility costs over all customer classes. Fire hydrants and street lights, for example, have been found to be public goods. Subway service has been found to be a public good. The basic telecommunications network has been found to be a “public good” as a justification for spreading network costs over all customer classes. “Economic development” has been found to be a public good, the costs of which are to be paid by all customer classes.

In economic theory, public goods are those products and services that are valuable to society but which are undersupplied when society relies on private markets to provide them. Even though deemed to be needed, public goods will not be made sufficiently available through private markets. Classic examples of public goods include street lights, city roads, and police protection.

The undersupply of public goods occurs because individuals cannot be prevented from using these items whether or not they pay for them. Furthermore, the use of such goods by one person does not diminish the ability of others to use that product as well. Under such circumstances, everyone has a powerful incentive to be a free-rider—to consume the good, but not to pay for it—and there can be little effective opposition to their doing so.

One commentator defined a “public good” as “one which is available for consumption to anyone regardless of whether or not one is able to pay for it. Once it is produced, it is not subject to the exclusion property. Moreover, the additional cost of providing another unit is at least negligible.”

A product can represent a “public good” even though the direct service is provided to an individual. For example, businesses do not go to school, individuals do. Businesses do not go to doctors, individuals do. Businesses do not place their children in day care, individuals do. Despite this, in each of these instances, the direct benefits to business from the affordable

provision of these “public goods” have been documented.

Affordable health care and child care, for example, are both akin to affordable home energy in their nature as public goods which provide direct and substantial benefits to business as well as individuals. Accordingly, business, as well as individuals, should be responsible for helping to pay for these public goods.

**Health care:** Affordable health care –to be distinguished from health insurance—is considered to be a public good under these definitions. The reasoning cites the widespread public benefits that will arise from a healthy workforce.

Health care is an important analogy to affordable energy because of the direct benefits it provides to business. It is recognized that, while it is obviously individuals who see doctors, affordable health care does not simply inure to the benefit of the individuals receiving health care. For example, business benefits as well. “The . . . improvement in the stock of human capital, similar to that derived from universal education, would increase the productivity and competitiveness of labor, resulting in an upward shift in society’s production function.”

One study of Canada’s national health insurance (NHI) found, for example, that benefits arise to business in particular. The study documented “increases in labor productivity, which followed increased job mobility or improvements in the health of the labor force.”

**Child care:** Investment in child care has been found to yield direct benefits to business as well. On a macro basis, as the Committee for Economic Development has reported, “business and the economy as a whole gain a more productive work force when employees feel confident that their children are secure and learning.” This is not merely a statement of policy, it is a conclusion based on considerable empirical research:

“Those companies that have taken steps to address the child care needs of their work force report that they have improved their ability to attract and retain high-quality personnel, thereby enhancing their current work force and their competitiveness.”

The Committee goes on to quantify the beneficial impacts to business:

“Many businesses also find that helping parents meet their child care needs can potentially reduce absenteeism and employee turnover. The 1990 *National Child Care Survey* (NCCS) found that 15 percent of the mothers in its sample who worked outside the home reported losing some time from work (including arriving late, leaving early, or having to take a full day off) during the previous month because of a failure in their regular child care arrangement.

“Studies have found that employee turnover produces disruption and inefficiency in the work environment and that the cost of replacing employees is high.”

For example, Merck & Co., Inc. found that it costs about 1.5 times annual salary to replace a manager and about 75 percent of salary to replace a clerical or technical employee. It also found that it may take considerable time to fill a vacant position and an average of 12.5 months for a new employee to become adjusted to the job.”

**Home energy:** While the impacts of affordable home energy on business have not been directly studied as have the impacts of affordable health care and child care, these impacts can be ascertained with merely a few small steps in reasoning from what *is* known about the impacts of unaffordable home energy.

1. Unaffordable home energy bills lead to the frequent mobility of households.
2. Unaffordable home energy leads to more frequent childhood illnesses.

3. The inability to stay warm due to unaffordable home energy bills leads to increased illnesses, including pneumonia, influenza, and other infectious diseases.

The problems arising from unaffordable home energy bills have been documented in multiple states. In Minnesota, for example, a 1998 study of low-income households considered low-income wage-earning households as one specific sub-population in its study of unaffordable home energy bills.

The *Minnesota Energy Gap* study found that over 40% of low-income wage-earning households do not seek needed dental care in order to pay a home energy bill; nearly one-third went without medical care (not seeking a doctor, not taking prescriptions in prescribed doses).

In addition, the Minnesota study found that nearly 20% of low-income wage-earning Minnesota households went without food for at least one day in the past month in order to pay a home energy bill. Finally, the study found that nearly 14% had their heat shut off (or ran out of fuel).

The Iowa Department of Human Rights found nearly identical results. According to a study performed by DHR, 12% of the recipients of federal LIHEAP benefits in Iowa during the 1999/2000 winter heating season went without food to pay their home heating bill, because of the unaffordability of that bill.

Moreover, the Iowa study reported that more than one-in-five went without medical care to pay for heating bills. This included not seeking medical assistance when it was needed, not filling prescriptions for medicine when a doctor had prescribed it, and/or not taking prescription medicines in the dosage ordered by the doctor;

Finally, according to the Iowa study, almost 30 percent reported that they did not pay other bills, but did not elaborate as to which bills were not paid.

As can be seen, the same business benefits arising from affordable health care and child care arise from affordable home energy as well. Increased productivity, decreased absenteeism, decreased staff turnover, decreased staff training, decreased costs of replacing employees, and decreased “disruption and inefficiency in the work environment.”

The Committee for Economic Development stated with respect to business financial investment in universal education that:

“a firm and enduring commitment to excellence in education on the part of America’s business community is not merely a matter of philanthropy; it is enlightened self-interest. As employers, taxpayers, and responsible community members, business can regard an investment in education as one that will yield a handsome return.”

Precisely the same can be said about an investment in affordable home energy. It “is not merely a matter of philanthropy, it is enlightened self-interest.” In sum, affordable energy is a public good from which all customer classes derive benefits. As a result, all customer classes should bear some part of the financial responsibility for providing that public good.

### **Contribution to Problem Being Solved**

The case for business participation in helping to pay the costs of universal service programs, as a public good, is strengthened even further when one recognizes the contribution that business, itself, makes to the creation of the “problem” being addressed.

### ***The Basis for Cost-Sharing***

One of the major contributing factors to the inability of households to make their home energy bill payments is the lack of a livable wage paid to workers. One measure of this contribution is the extent to which actual wages are below livable wages. A four-person household (2 adults, 2 children, ages 3 and 6 years old) in Louisiana, for

example, needs to earn \$28,714 to meet its basic needs.

This budget is a subsistence budget, about 33% less than the average family income in the state. For example, this family does not go out to eat at restaurants; cannot afford a television or other appliances; purchases day care that is 30% cheaper than the state average; spends half of what the average family does on transportation; and has no money to allocate for life insurance, the purchase of a new home, a child’s college education, retirement, or a vacation.

Data show that 87% of the jobs with the most growth in Louisiana pay less than a livable wage; 41% of these jobs pay below half a livable wage. These jobs occur throughout all business sectors.

This is not to say that businesses should pay for rate affordability programs on a direct cost causation basis. It is to say, however, that if all workers were paid a livable wage with which to begin, the need for affordability programs funded through a system benefits charge would be mitigated, if not eliminated. All sectors of society contribute to the need and, as a result, all customer classes should contribute to the solution.

Recognizing the subsidies provided to employers paying a poverty wage has been a long-established basis for supporting the federal minimum wage. One analysis of “living wages” reported, for example, that:

“ . . . employers who pay poverty wages are effectively being subsidized by taxpayers through government assistance programs (e.g., food stamps, Earned Income Tax Credit) which help many low-wage employees survive. . . [B]usinesses that pay poverty wages indirectly rely on government assistance programs to make up the difference between these wages and what it costs their employees to live. Without the intervention of government and private charities, paying poverty wages wouldn’t be a sustainable business practice.”

The same analysis applies to public utilities. In the absence of cost sharing across all customer classes, what is occurring is that the employers who pay less than a livable wage, in effect, transfer the employee/employment costs of running their business to other ratepayers (in the form of unpaid bills, collection costs, and the like). The transfer is made more likely for public utilities (than for other businesses) because of the essential nature of utility service and the regulated nature of public utilities which places restrictions on the termination of service due to nonpayment. Requiring all customer classes to help pay for the programs which respond to the inability-to-pay simply recognizes the role which all customers play in creating the problem.

### ***The Extent of the Cost-Sharing***

Requiring all customer classes to pay their share of a system benefits charge will not impose substantial financial obligations on industrial or commercial customers. A recent analysis of a system benefits charge in Mississippi, for example, found that industrial customers would be required to pay \$2,700 per year in a “meters charge.” This compares to an average annual industrial natural gas bill of \$281,802. The charge would thus be less than one percent of the total average industrial gas bill.

Moreover, this increase in natural gas or electric costs would be offset in large part by increases in employee productivity. One professor at Johns Hopkins University considered the extent to which increased minimum wages resulted in increased overall costs to business. She found a variety of offsets, reporting:

“Poverty. . . produces ill-prepared workers whose lives are easily disrupted by small catastrophes. If the car breaks down, if the kid gets sick, it suddenly becomes impossible to be a reliable worker. Poverty also generates poor health among workers, making them less reliable still and raising the cost of employing them.”

Paying a small increase in costs to help generate these offsetting benefits is a reasonable investment for a business to make.

## **SUMMARY AND CONCLUSIONS**

States across the country today are imposing system benefits charges in support of programs to promote affordable universal home energy service.

One basic design issue is whether, or to what extent, customers other than residential customers should be called upon to bear some portion of those costs. The analysis set forth above concludes that it is not only reasonable, but also necessary, for all customer classes to pay a share of the affordability programs.

Persons interested in receiving a copy of the full FSC analysis, titled *System Benefits Charges: Why All Customer Classes Should Pay*, with the accompanying data tables and footnoted references for the material above, may send a request to [roger@fsconline.com](mailto:roger@fsconline.com)

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