ESSENTIAL SERVICES AFFORDABILITY PROGRAM

(ESAP)

WHITEACRE UTILITY COMPANY

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SYNOPSIS

- Utility Company proposes to offer a pilot low-income bill affordability program to customers receiving assistance through one of three programs: (1) Temporary Aid to Needy Families (TANF--formerly AFDC)); (2) Supplemental Security Income for the disabled (SSID); or (3) state or county General Assistance. Utility Company will offer a package of services to help these households acquire and manage resources sufficient to improve the affordability of essential home energy services.
- Utility Company proposes to shoulder a capped responsibility for home energy bills that exceed the household and governmental resources that can be brought to bear on those bills. Utility Company's responsibility will be capped at 60% of a customer's base year bill. Utility Company's contribution toward meeting this responsibility can be met through one of three means: (1) rate discounts; (2) cash assistance; or (3) energy efficiency investments. Utility Company's contribution will be the marginal resource to be called upon to meet the household's energy bill.
- Utility Company will also assist the household to tap non-household, non-Utility Company resources to help pay home energy bills.
- Utility Company will enter into a long-term deferred payment plan to retire pre-existing arrears, if any. No arrearage forgiveness is proposed.
- Finally, since Utility Company recognizes that the best mechanism to improve bill payment by poverty households is to help them move out of poverty, Utility Company commits to working with advocates and others to develop and promote an Individualized Development Account (IDA) program authorized by the existing federal TANF statute.

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PROGRAM DESIGN

1UTILITY COMPANY COMMITMENT

Utility Company (Utility Company) proposes to implement, on a pilot basis, the Essential Services Affordability Program (ESAP) outlined below directed toward designated low-income consumers in its service territory. If found to be "successful" based on criteria outlined in the proposal, Utility Company proposes to expand the ESAP pilot project to additional low-income consumers.

2PRINCIPLES GOVERNING ESAP

Utility Company has developed ESAP to advance six specific principles:

- 1.Utility Company will provide participating customers with quality, desirable service at least cost, and at a profit to shareholders.
- 2.Utility Company will target a package of discrete types of company-provided assistance to different populations of low-income residential customers, which packages may vary depending upon the "needs" which are identified for each population. Utility Company does not commit (or propose) to expand ESAP to *all* low-income consumers. Future Utility Company interventions will be appropriate to the particular low-income customers' needs.
- 3.Utility Company will package company-provided assistance to obtain synergistic results. Each component of the program below is designed to support and enhance each other program component.
- 4.Utility Company will package company-provided assistance to address both the short-term and long-term needs of participating customers.
- 5.Utility Company will package company-provided assistance to advance specific pre-established goals and objectives and will measure the propriety of continuing such assistance by the success of the assistance in accomplishing those goals and objectives.
- 6.Utility Company will package company-provided assistance which, while not required to be self-funding, will offer the reasonable potential of delivering tangible financial business benefits to the company.

3BENEFITS TO UTILITY COMPANY SHAREHOLDERS AND NON-PARTICIPATING CUSTOMERS

Utility Company is offering ESAP to customers as described below with the expectation that it will generate benefits not only to the participating customers, but to the Company's shareholders and non-participating customers as well. While Utility Company recognizes its obligation to pursue universal service, it further recognizes its obligation to deliver least-cost service for all customers and to deliver shareholder returns based on efficient and prudent management.

Utility Company expects ESAP to deliver at least the following major benefits to shareholders and to non-participating customers:

- 1.ESAP is expected to reduce company expenditures in a range of operations. Expenditures attributable to ESAP customers should be reduced in the following areas: credit and collection; uncollectible revenue; working capital associated with carrying arrears; and the provision of supplemental services (such as negotiating deferred payment plans).
- 2.ESAP is expected to increase actual cash intake from program participants. A number of utilities have found that with their lowest income populations, reducing the bills to more affordable levels actually has the *impact* of increasing cash paid as customers pay a higher percentage of their bill.
- 3.ESAP is expected to increase the "net back" from program participants. Maximizing investment return is not simply a matter of maximizing revenue, or of minimizing expenses. "Net back" measures the net revenue collected from program participants after subtracting collection expenses.
- 4.ESAP is expected to reduce the long-term churn of program participants. Low-income customers can be expected to churn, whether through customer mobility or through customers switching service providers. As the electric industry becomes more competitive, Utility Company will be required to fight for its customers, just like any other competitive industry. Since it is much more expensive to acquire rather than to retain a customer, it is in Utility Company's best interest to begin immediately to convert ESAP customers into stable, long-term Utility Company customers.
- 5.ESAP is expected to allow Utility Company to more effectively and efficiently target its scarce collection resources. Just like any other aspect of company operations, collection activities have limited resources. Seeking to collect unpaid money from the lowest income customers is one of the least effective, and least efficient use of resources. By managing these lowest income customers through ESAP, Utility Company hopes to be able to redirect its collection activities toward other customers, with more collection potential, both to collect unpaid money and to accelerate late payments.
- 6.ESAP is expected to provide Utility Company with the opportunity to proactively manage its long-term costs of serving low-income customers. Rather than responding to non-payment on an *ad hoc*, customer-by-customer basis, ESAP will allow Utility Company to identify where substantial subsidies are flowing, to reduce those subsidies by reducing bills through energy efficiency, and to reduce the Utility Company responsibilities through directing non-Utility Company resources to customers with the highest subsidy needs.

7.ESAP is expected to provide Utility Company with the means to substantially leverage non-Utility Company resources to address long-term bill payment problems. The resources sought in this respect are not emergency "fuel fund" payments. Rather, ESAP is expected to help Utility Company leverage non-company resources. For example:

(a) Utility Company would have both an incentive and an ability to identify the potential for increasing energy efficiency in low-income housing (thus reducing unpaid bills). Working to increase private financing for energy efficiency in both new construction and substantial or moderate rehabilitation programs would represent such leveraging; (b) Utility Company would have both an incentive an dan ability to increase the non-Utility Company resources devoted to helping customers move out of poverty. Soliciting other business support for the IDA component of ESAP is such an effort.

The performance criteria discussed below are specifically designed to allow Utility Company to measure and track the extent to which these expectations are fulfilled.

4GOAL AND OBJECTIVES OF THE ESSENTIAL SERVICES AFFORDABILITY RATE (ESAP)

4.10verall Goal of ESAP

The overall goal of Utility Company's ESAP initiative is to increase the sustainability of home energy bills to participating customers.

4.20bjectives of ESAP

The objectives of ESAP directly flow from the goal of increased "sustainability." The "objectives" are to be both attainable and measurable within a designated time frame. Based upon the desire for direct objective measurement, the objectives of ESAP within the time frame of the proposed pilot project are as follows:

- 1. Expand financial resources: The one thing that is *not* likely to occur in any future consideration of *federal* fuel assistance funding is a substantial expansion of federal funding. Hence, ESAP will seek additional resources *not* involving federal fuel assistance to be brought to bear on low-income energy problems.
- 2. <u>Public/Private Partnerships</u>: Given: (a) the need for greater resources; and (b) the substantial benefits that flow to Utility Company as a result of low-income bill payment assistance, ESAP will seek an expanded public/private partnership as an essential component.

- 3. <u>Increased Targeting</u>: Given scarce resources relative to need, ESAP will precisely target benefits to those households most in need.
- 4. <u>Increased Weatherization Integration</u>: Given: (a) the one-time nature of cash (or bill reduction) affordability benefits; and (b) scarce resources relative to need, ESAP will increase the integration of weatherization and bill affordability assistance to promote the liquidation of the need for ESAP assistance.
- 5. <u>Increased Personal Responsibility</u>: Consistent with other current welfare reform proposals, ESAP will promote individual household responsibility and self-sufficiency.

5ESAP STRATEGIC APPROACH

The strategy of ESAP is as follows: to supplement available household resources with available non-household resources devoted to the complete and timely payment of the non-wasteful energy use of customers. This strategy has several important policy components to it.

- ♦ First, the strategy recognizes that Utility Company has a role to play in identifying and bringing "non-household resources" to bear on the payment of energy use.
- ◆ Second, the strategy recognizes that bill payment has both a quantity element and a time element. Utility Company wants not only "complete" payment, but it wants "timely" payment as well. If a complete, but late, payment can be accelerated to be complete and timely, the ESAP strategy is being fulfilled. Similarly, if an incomplete and late payment can be accelerated so that it is timely, even if not complete, Utility Company will be advancing its strategy.
- ◆Finally, Utility Company seeks payment for only "non-wasteful" energy use. Every dollar of non-household resources that goes to pay a bill that could have been eliminated through energy efficiency, for example, is a dollar of non-household resources that could have been available to someone else if the wasteful energy use had been eliminated. In this sense, a public benefit that cannot be transferred to another household is considered a "household resource."

6ESAP TACTICAL APPROACH

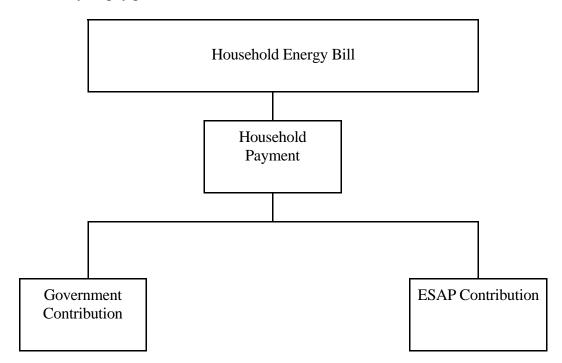
6.1The General Tactical Approach

Overall, ESAP's tactical approach stands on two basic propositions. *Proposition 1* is that each party to the bargain --this includes the low-income household, the government, and Utility Company-should contribute in some fashion to resolving a low-income household's inability-to-pay problem. *Proposition 2* is that the government and Utility Company components should be structured such that

the bill payment supplement responsibilities are finite and potentially liquidating through the implementation of energy efficiency measures. Given these principles, the tactical approach of ESAP involves the following three steps:

- **Step 1:** The first step is to identify the low-income energy need. While ESAP is not a "percentage of income payment plan" (PIPP), low-income "needs" *will* be based on energy burdens, *i.e.*, on household energy bills as a percentage of household income.
- **Step 2:**The second step is to apportion the responsibility of the energy bill amongst the relevant players. The household will have the first responsibility to pay. The household would be expected to make designated payments toward its home energy bill each month. The excess of that bill over the affordable burden, (*i.e.*, the "need") would then be apportioned to non-household resources, *i.e.*, to the government and ESAP. ESAP resources represent the residual payment as explained below.
- **Step 3:** The final step is to engage in usage reduction measures to move total household energy consumption towards a level where the designated household payment is sufficient to pay the entire home energy bill without the intervention of non-household resources.

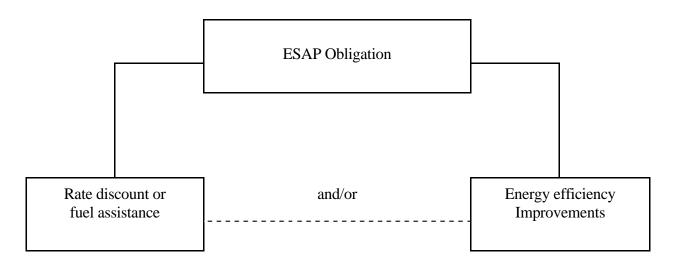
ESAP would thus see a combined effort involving households, Utility Company and government to address inability-to-pay problems as follows:



6.2The Interaction of Energy Efficiency and Rate Affordability

Not all Utility Company benefits to a household would be required to be cash benefits under ESAP. Rather than requiring the delivery of cash benefits (either in the form of cash assistance or in the form of discounts by the Company), Utility Company can deliver bill reductions in the form of energy efficiency improvements which deliver the equivalent amount of annual dollar benefits in energy savings.

To illustrate, assume Utility Company has an ESAP obligation to Household A of \$500 per year. Assume further (hypothetically) that a company-sponsored energy efficiency program reduces Household A's home energy bill by 20 percent (from \$1200/year to \$960/year). The annual ESAP obligation has, therefore, been reduced by almost 50 percent (\$500 vs. \$240).



If, instead of providing a rate discount, Utility Company provides energy efficiency improvements that reduce a low-income consumer's annual bill by an equivalent amount, the Company will have met its ESAP obligations.

6.3The Advantages of the ESAP Tactical Approach

The advantages of structuring ESAP in this fashion are several-fold:

◆First, the program takes into account the proposition that households must make a responsible contribution toward their own home energy bills. Like Percentage of Income Payment Plans (PIPPs) in operation around the country today, households are expected to pay that portion of their energy bill which represents an affordable burden.

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- ◆ Second, the program takes into account the notion that while inability-to-pay problems represent a social problem, they are not *strictly* a social problem. Thus, while government has a role to play in addressing the problem, Utility Company has a role to play as well.
- ◆Third, as detailed below, the program promotes a close integration with energy efficiency efforts.

 Utility Company may fulfill its "fuel assistance" obligations through the delivery of energy efficiency improvements.
- ♦ Finally, again as detailed below, the program allows Utility Company to control its exposure to liability in a cost-effective manner. If Utility Company is able to meet its obligation to provide annual benefits to the household most cost-effectively through the delivery of energy efficiency improvements rather than through cash payments, it is permitted to do so.

7THE PROPOSED PILOT PROJECT

To test the efficacy of the ESAP design, Utility Company proposes the following pilot project.

7.1Identifying the Population to be Served

The population to be served is to be considered within a two-part context: (1) those who are *eligible* for assistance; and (2) those who will be *targeted* for assistance. Any customer who is eligible may receive assistance through the ESAP pilot to the extent of the pilot enrollment figure. Utility Company, however, will affirmatively seek out and market ESAP to that population targeted for assistance.

7.1.1Eligibility

Any customer receiving public assistance through one of the following three programs will be eligible to receive assistance through the ESAP: (1) the Temporary Aid to Needy Families (TANF) program (formerly AFDC); (2) the Supplemental Security Income--Disabled (SSID) program; or (3) the state or local General Assistance (GA) program.

These three populations have not been chosen as being the low-income populations *exclusively* in need. They have been chosen because they are *unquestionably* in need. As mentioned throughout, Utility Company commits itself to future development of specific intervention strategies appropriate to the specific needs of other identifiable low-income populations.

7.1.2Targeting

Utility Company will target assistance to any customer meeting the ESAP eligibility criteria *and* experiencing either: (1) arrears of at least \$200; *or* (2) arrears of at least 90 days old.

7.1.3Limited Pilot Participation

The total number of ESAP participants will be limited to 500 customers during the first three years of the program.

7.2The Generalized Intervention Design

Utility Company's obligation to provide its respective contribution can be met by either of three alternative ways as follows: (1) through a cash supplement/rate discount, or (2) through energy efficiency improvements, or (3) some combination of the two. Hence, the delivery of benefits from Utility Company can take the form of either discount rates or energy efficiency improvements. The delivery of benefits from either can involve a combination of the two alternatives as well (e.g., a \$200 responsibility met by a \$100 cash payment *and* a \$100 bill reduction through energy efficiency improvements).

7.2.1Energy Efficiency as Mechanism to Meet ESAP Responsibility

The ability of Utility Company to liquidate the liability for providing benefits represents a significant advance in the means of delivering low-income rate affordability assistance.

- ◆The ESAP proposal provides a market incentive for Utility Company to deliver all potential cost-effective energy efficiency improvements to low-income households. If through the expenditure of \$100 on energy efficiency improvements, in other words, Utility Company can eliminate its obligation to provide \$110 in cash benefits, it has an incentive to do so.
- ◆ Second, the ability to liquidate the liability for providing benefits provides a market incentive for Utility Company to efficiently target its delivery of energy efficiency measures. Assume two households (Household A and Household B) are on the Utility Company system. Because of high consumption (and thus high bills), Household A poses a fuel assistance obligation of \$500 to Utility Company. Because of low consumption, Household B poses a smaller fuel assistance obligation of only \$100 to Utility Company. Under ESAP, Utility Company will now have a financial incentive to target that high consumption household (Household A) for energy efficiency improvements.
- ♦ Third, the ability to liquidate the liability for providing benefits provides a market incentive for Utility Company to expeditiously target its delivery of energy efficiency measures.

Each year of delay in reaching the high consumption households would mean another year of delivering one-time cash payments that provide no on-going benefits.

- ◆Fourth, the ability to liquidate the liability for providing benefits provides a substantial incentive for Utility Company to identify and eliminate lost opportunities for cost-effective energy efficiency investments in low-income households. A "lost opportunity" involves a situation where the occurrence of one event will preclude the future implementation of energy efficiency investments. Under ESAP, each "lost opportunity" represents a long-term commitment to provide cash rate affordability assistance that could have been eliminated by energy efficiency.
- ◆Fifth, the ability to liquidate the liability for providing benefits provides an important incentive for Utility Company to work with the government to ensure an appropriate targeting of both fuel assistance and energy efficiency investments. Each dollar of bill reduction obtained through fuel assistance, as well as each dollar of additional energy assistance targeted to high need households will reduce Utility Company's ESAP obligation.
- ◆ Finally, the ability to liquidate the liability for providing benefits provides an opportunity for Utility Company to substantially reduce its *ongoing* responsibility for low-income energy assistance. If Utility Company can show, in other words, that it has reached each of the "n" applicants for ESAP assistance in its service territory, providing an equivalent bill reduction through energy efficiency, the Company will have met its responsibility without further financial expenditures.

7.3The Specific Intervention Design

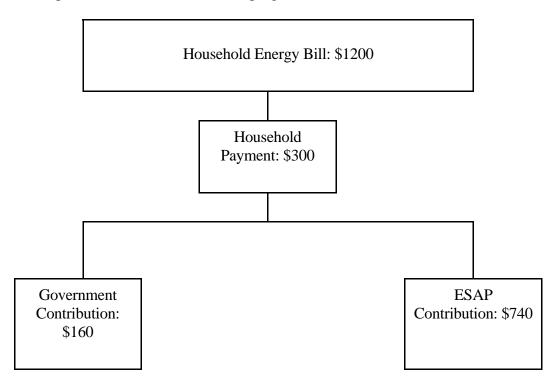
7.3.1The Allocation of Payment Responsibility

- 1. The Customer's Payment Responsibility: Utility Company posits that low-income customers should be capable of paying at least ten percent of their income toward their combined heating and non-heating home energy bills. Assuming a TANF annual income of \$3,100, the customer's payment responsibility would equal \$310.
- 2. Government and Utility Company's Payment Responsibility: Home energy bills in Louisiana are estimated to reach roughly \$1,200. The government and Utility Company payment responsibility would thus be roughly \$900 under ESAP. In 1995, Louisiana LIHEAP benefits equalled \$160 per household. Taking LIHEAP benefits as a constant, Utility Company's payment responsibility would thus be 60 percent of the customer's total bill.

[\]textsup{\lambda}\This represents a 1992 estimate of low-income home energy bills escalated at the CPI-U for "fuels and utilities" through June 1998.

Under ESAP, the Utility Company ESAP obligation will be capped at 60 percent of the customer's bill. In addition, the Utility Company obligation is the *residual* obligation. To the extent that: (1) the household's energy bill is reduced, or (2) additional non-household resources are brought to bear on the customer's bill, the ESAP obligation goes down.\(^{2}\)

Under these parameters, a Louisiana ESAP program would look like this:



7.3.2The Specific Utility Company ESAP Interventions

Customers participating in ESAP will receive two packages of specific interventions from Utility Company. The first package is directed toward mustering total household and non-household resources to pay the Utility Company home energy bill. The second package involves assisting the household with managing its resources. The specific interventions include:

^{\(^2\)}Thus, for example, if a customer's bill is only \$900 --whether that be due to energy efficiency investments through WAP, because of moderate weather temperatures or for some other reason-- the customer payment remains \$300; the LIHEAP payment remains \$160, and the Entergy payment becomes \$440.

- 1. Mustering household and non-household bill payment resources: The first set of interventions is designed to generate household and non-household resources to pay the household's home energy bill. The interventions include:
- ♦A comprehensive energy efficiency audit contracted to be provided through the local federal Weatherization Assistance Program (WAP) sub-grantee.
- ♦ An appliance monitoring protocol with refrigerators consuming in excess of xxx kWh per day (probably from 5 to 8) being replaced at no cost to consumers; (3)
- ♦ A two session energy education package designed to identify potential energy saving customer action in the home.
- ♦ A single "needs and resources" counselling session at which the customer will meet with a trained non-company case manager to determine whether the customer has applied for all available public assistance.
- ◆A commitment by Utility Company to reduce the customer's energy bill by up to 60 percent through: (1) a rate discount; or (2) energy efficiency investment; or (3) some combination of the two.
- ♦ A deferred payment plan with respect to pre-existing arrears as described below.
- 2. Managing household resources: The second set of interventions is designed to help ensure that the total resources brought to bear on the household's home energy bill will be used most effectively to ensure bill payment:
- ♦ A levelized budget billing arrangement calculated as per Attachment A to this ESAP description;
- ♦ An agreement to provide out-of-cycle reminder calls if bill payments have not been received within five days of the due date.
- ♦ A "customer choice" payment date under which the customer may choose the day of the month on which the budget bill payment will be due.
- 3. <u>Pre-existing arrearages</u>: The third set of interventions relates to payment of pre-existing arrearages. Utility Company proposes no arrearage forgiveness program. In lieu of

^[3]To the extent that the refrigerator is owned by a landlord, Entergy reserves the right to seek a landlord financial contribution toward the cost of the refrigerator.

arrearage forgiveness, Utility Company proposes to enter into deferred payment plans for pre-existing arrears under the following parameters:

- ♦ Pre-existing arrears will be paid through a deferred payment plan over 24 months;
- ◆ A minimum monthly payment of \$5 towards pre-existing arrears will be required. This minimum monthly payment is chosen since it will, on average, add no more than two percent (2%) toward a household's energy burden;
- ◆A maximum monthly payment towards pre-existing arrears, equal to one half of the household's energy payment requirement, will be required. This maximum monthly payment is chosen since it will, on average, cap total household energy burdens at 15 percent of income.
- ♦ To the extent that the customer's pre-existing arrears cannot be paid in full over 24 months given the pre-existing arrears cap, the excess arrears will be frozen. Upon completion of the first 24 months, a second deferred payment plan will be entered into using the identical parameters.

7.3.3Cap of 60 Percent Responsibility

In no instance, will Utility Company's responsibility for providing ESAP assistance exceed 60 percent of the customer's base year bill. Moreover, in each year, Utility Company's bill payment responsibility is the marginal responsibility. Utility Company's responsibility is calculated only after household payments and government benefits are first subtracted from the total household energy bill.

7.3.4Cash Assistance/Rate Discounts

To the extent that ESAP delivers bill affordability assistance through cash assistance or a rate discount, the discount will be provided as a fixed monthly credit on the customer's bill. The customer will be responsible for paying any increase in the bill over the bill which serves as the basis for the fixed credit calculation. Fixed credits will be determined annually.

7.4An Additional Proposal: Individualized Development Accounts (IDAs)

The best way to address the inability-to-pay problems of low-income customers in the long-term is to help those customers move out of their poverty status. Through the ESAP program, Utility Company is willing to work to help make that happen.

Recent federal legislation allows participants in the federal TANF program to create Individualized Development Accounts (IDAs) in support of homeownership or education. Federal legislation

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allows a TANF recipient to accumulate assets, notwithstanding otherwise limiting asset restrictions, in the form of bank accounts that are earmarked for purposes of homeownership or education expenses. The IDA is based on the principle of obtaining local matching funds (on a 1:1 or 2:1 basis) for each dollar that the TANF recipient commits to the IDA.

Utility Company commits itself to working with the local social services network to develop an IDA project focused on ESAP recipients. Utility Company further commits itself to provide the matching grant either: (a) by itself; or (b) through other local businesses which Utility Company will solicit in support of the initiative.

7.5The Term of the Pilot Program

Utility Company proposes to deliver ESAP benefits for three years. During the third year of the program, Utility Company will perform both a process and impact evaluation. If found to be successful based on the performance measurements identified below, ESAP will be continued and expanded beginning in Year Four.

7.6The Cost of the Program

7.6.1 Annual Costs

The cost of the ESAP proposal will vary by year. Costs will ramp up as program participation increases. If Utility Company's program design is correct, the costs of the program will moderate as Utility Company liquidates its bill payment assistance responsibility through the implementation of energy efficiency measures. A year-by-year cost estimate of the program is presented in Attachment B.

7.6.2Cost Assumptions

Several important assumptions underlying these cost estimates are as follows:

- ◆ The cost of the energy efficiency program will be \$2,000 per participant;
- ◆ The cost of the energy efficiency program will be expensed in Year 1 of each expenditure; \(^{\lambda}\)
- ◆ The energy efficiency program will reach one-third of the program participants each year;
- ◆ The energy efficiency program will result in a 15 percent annual energy savings; \5\

\dagged\footnote{\text{It}} \text{ would be perhaps more appropriate to amortize the energy efficiency investments over a multi-year time period to show the "true" cost of the program.

◆The average income of a participant is \$3,000, with the participant paying 10 percent of income, and the ESAP cost apportionment capped at 60 percent.

A Year Four is included in this analysis even though ESAP is proposed as a three year program so that the impacts of energy efficiency on liquidating the rate affordability responsibility can be seen.

7.6.3Administrative Costs

Administrative costs are not separately budgeted. Only incremental administrative costs would need to be budgeted. For purposes of the pilot, the incremental administrative costs, if any, are assumed to be offset by administrative savings generated from the program.

7.6.4Limitation of Cost Estimate

As emphasized above, Utility Company believes that different low-income populations will require different interventions. The proposed ESAP pilot project is directed toward one of the most needy households: customers on public assistance. With an average annual income of \$3,000, these ESAP participants are expected to: (1) be amongst the most seriously in need; and (2) be amongst the most expensive to provide assistance.

As a result of these observations, it would *not* be appropriate to assume that a move from the proposed ESAP population into other low-income populations would require the same interventions, or would need equivalent amounts of Utility Company resources.

8PERFORMANCE MEASUREMENT

ESAP performance is proposed to be measured through the indexes set forth in Attachment C.

^{(..}continued)

^{\(^5\)}The energy efficiency program, in fact, is expected to generate higher savings. To minimize any potential reaction by those outside the company that the program cost is understated, the savings are conservatively estimated. To the extent that savings are, in fact, higher, the subsequent program year costs will be lower.

	Attachment A						
1	Estimated annual bill	\$1200 /a/					
2	Estimated annual income	\$3,100 /b/					
3	Household annual payment at 10% of income	\$310					
4	Household monthly payment (line 3 / 12)	\$26					
5	Assumed LIHEAP benefit	\$160					
6	New estimated bill (line 1 - line 5)	\$1,040					
7	Dedicated public benefit payment	\$0 /c/					
8	Utility Company contribution (line 1 - line 3 - line 5)	\$730					
9	Utility Company fixed credit	\$61					
10	Total arrears coming into program	\$600					
11	Monthly deferred payment plan payment at 24 month plan	\$25 /d/					
12	Arrears payment limited by customer income-based payment	\$13 /e/					
13	Total monthly payment	\$39 /f/					

NOTES:

/a/The original estimated bill to be determined by the Company's routine procedure for equal monthly payment plans.

/b/Given the limitation of this program to households receiving specific types of public assistance, it is not likely that this income will see substantial variation between customers.

/c/In this illustration, this is assumed to be \$0.

/d/Assumes a 24 month payment plan.

/e/Line 11, except that amount is not to exceed line 4 x 0.50.

/f/Assuming that total household bill does not increase. Customer pays for any increase in household bill over historical bill.

Attachment B									
	Rate Affordability			Energy efficiency			Total Cost		
	No. Participants	Dollars per Participant	Total Rate Aff. Cost	No. Parts	\$ per Participant	Total En. Eff. Cost			
Year 1									
No energy efficiency	250	740	\$185,000	0	0	\$0			
With energy efficiency	0	0	\$0	170	2000	\$340,000			
Total			\$185,000			\$340,000	\$525,000		
Year 2									
No energy efficiency	330	740	\$244,200			\$0			
With energy efficiency	170	560	\$95,200	170	2000	\$340,000			
Total			\$339,400			\$340,000	\$679,400		
Year 3									
No energy efficiency	160	740	\$118,400			\$0			
With energy efficiency	340	560	\$190,400	170	2000	\$340,000			
Total			\$308,800			\$340,000	\$648,800		
Year 4 (without new participants)									
No energy efficiency	0	740	\$0			\$0			
With energy efficiency	500	560	\$280,000	0	0	\$0			
Total			\$280,000			\$0	\$280,000		

ATTACHMENT C:

PROPOSED ESAP PERFORMANCE MEASUREMENTS

The indices outlined below represent mechanisms to use in *measuring* the performance of ESAP. The performance indices presented below are not intended to involve making subjective judgments about the program. They instead allow evaluators to measure objective program attributes. The performance indices recommended allow:

oA measurement of the *amount* of bill payment;

oA measurement of *prompt* payment of bills;

oA measurement of *regular* payment of bills;

oA measurement of *complete* payment of bills;

oA measurement of *continuing* payments (through contribution to fixed costs);

oA measurement of *net-back*.

The indices proposed below recognize that a utility is most concerned with the amount of bill payment received. There are other attributes of bill payment, as well, that should be recognized. These include promptness (timely payment is better than late payment), regularity (12 payments of \$100 are better than two payments of \$600), completeness (a \$100 payment toward a \$100 bill is better than a \$100 payment toward a \$200 bill), and the continuing nature of bill payment (long-term stable customers are better than short-term high-turnover customers). All of these attributes can be measured.

In contrast, net-back is a program evaluation measurement which combines program effectiveness and cost-effectiveness into one measurement.

Index #1: Measuring Customer Cash Payments: The first performance index measures whether customers increase the dollars paid toward current usage as a part of the program. This performance index involves four components. It measures: (1) the dollars, (2) paid "by the customer," (3) toward current usage, (4) as part of the program.

Index #2: Measuring Prompt Payment of Bills: The second performance index measures whether the customer pays his or her bills more promptly. This performance index involves four components. It measures: (1) the dollars, (2) paid by the customer, (3) relative to the dollars *asked* to be paid by the customer, (4) relative to the date on which the

dollars are first billed. This, of course, is precisely what a "payment pattern analysis" measures.

- Index #3:Measuring Regular Payment of Bills: The third performance index measures whether the customer makes his or her payments more regularly. This performance index involves four components. It measures: (1) the payments, (2) made by the customer, (3) toward current or past due bills requested to be paid by the customer, (4) relative to a total time period. In this regard, the measurement is in terms of "payments" rather than dollars. A more frequent number of smaller payments is a more desirable outcome than a smaller number of payments of larger amounts, even if over time both streams of revenue generate the same number of dollars.
- Either one of two performance measurements can capture the regularity of payments: (1) the payments made as a percent of the number of bills rendered by the Company in a given time period; or (2) the payments *per customer* in a given time period. (6)
- Index #4: Measuring Complete Payment of Bills: The fourth performance index measures whether the customer pays his or her bills more completely. This performance index involves three components. It measures: (1) the dollars left unpaid, (2) relative to the dollars billed to the customer, (3) relative to a particular point in time. This performance measurement should incorporate the "bills behind" statistic developed by the Pennsylvania Bureau of Consumer Services.
- Index #5:Measuring Contribution to Fixed Costs: The fifth performance index measures whether customers make an increased contribution toward system fixed costs if his or her bills are paid more completely. This performance index involves three components. It measures: (1) the dollars paid by the customer, (2) relative to the variable costs of providing service to the customer, (3) relative to the fixed costs of the system charged to the customer. This performance measure does more than simply look at whether customer payments increase. The index picks up the benefits from keeping customers on the system. If customers stay on the system rather than being

⁶In this regard, the use of annual data would fail in two different respects in this measurement. First, it does not capture cross-period bills and payments. Second, the use of the limited number of data points generated by annual data does not permit the identification, let alone the analysis of, trends over time. A three month rolling average used to develop monthly data points for this measure, or the use of a three month period (number of payments made per each three months) would allow an evaluation to examine whether an improvement in payment regularity had occurred.

This phraseology involves a conscious change from the "by the customer" language in previous performance indices. Unlike those other situations, in *this* performance index, the program should be concerned only with total bill payment coverage. Evaluators should be indifferent as to the source of the dollars.

disconnected (or moving), they will continue to make payments and thus increase their fixed cost contributions.

Index #6:Improved Universal Service Performance: The sixth performance index measures the total performance of customers vis a vis payment troubles. The involve the composite score of five different factors as follows:\(\frac{8}{3}\)

a. **Termination Rate:** Termination rate is calculated by dividing the number of residential service terminations by the number of residential customers. The termination rate compares the performance from a specified period to the termination rate for a base period. If the company is at the base period level, it will receive a score of 5. For every .10% divergence from the base period, it will receive a plus or minus rating of 1 respectively.

b. Money at risk index:

The money at risk index is calculated by indexing the sum of all money in arrears not in payment plans and all money subject to payment plans in a study period to the sum of all arrears not in payment plans and all money subject to payment plans in a base year. If the company is at the level of the base year, it will receive a score of 5. For every 0.2 divergence from the base year index, the company will receive a plus or minus rating of 1 respectively.

c. Deferred payment agreement success: The deferred payment agreement success rate is calculated by dividing the number of deferred payment plans that are completed without renegotiation and without service disconnections by the number of deferred payment plans that a company enters into in a given time period. The deferred payment agreement success rate compares the performance from a specified period to the success rate in a base period. If the company is at the base period level, it will receive a score of 5. For every four percent (4%) divergence from the base period, it will receive a plus or minus rating of 1 respectively.

d. Weighted arrears:

The weighted arrears score is calculated by dividing the total residential monthly arrears not subject to deferred payment agreements by the average residential monthly customer bill. The score, also known as a Bills Behind statistic, is a weighted arrears for all households who are not in deferred payment agreements. The weighted arrears factor compares the performance of the company to the average "weighted arrears" rate for a specified period to the average rate for a base period. If the company is at the average, it will

^{\8\}This performance index was the one relied upon by the Pennsylvania PUC in adopting its recent reporting requirements for universal service programs. In addition, the basic model was defined and explained in the June 15, 1998 issue of Public Utilities Fortnightly.

receive a score of 5. For every two-tenths (0.2) bill divergence from the average, it will receive a plus or minus rating of 1 respectively.

e. Percent customers in debt: The percent of customers in debt score is calculated by dividing the total number of residential customers in arrears (but not subject to payment plans) by the total number of residential customers. This component compares the annual performance of a specific company to the average "customers in arrears" rate for a base period. If the company is at the base period level, it will receive a score of 5. For every two percent divergence up or down from the average, it will receive a plus or minus rating of 1 respectively.

The "universal service index" is calculated by summing the scores based upon the above calculations and dividing by five. The scores are effective at showing the *direction* of universal service performance rather than the level of performance. The scores will not allow a determination of whether universal service is "good" or "bad." What it does allow is a determination that, whatever the performance, that performance is either "improving" or "declining."

Index #7:Improved "Net Back": The seventh performance index measures whether the company experiences an increased "net back" if customer bills are paid in either a more complete or more timely fashion. While generally viewed as a measure of cost-effectiveness. back" combines "effectiveness" fact. "net "cost-effectiveness" into one comprehensive evaluation criterion. It provides not only a measurement of the effectiveness of a program (through the "collection rate" measure), it provides for a measurement of the costs of the process as well. Finally, by combining the two measurements into one criterion, "net back" provides for a balancing of both factors --effectiveness of the process on the one hand and costs of the process on the other hand-- as well. The "net back" performance criterion involves three components. It measures: (1) the revenue that is billed to the customer, (2) the collection rate (which involves the percentage of billed revenue that is actually collected); and (3) the cost of collection.

In measuring whether the Company experiences an increased "net back" as part of the pilot program, this performance index examines the revenue billed relative to the revenue collected and the cost of collection.