#### Section 5

#### PROGRAM EVALUATION

Measurement systems are used <u>as one tool</u> to evaluate performance, goal achievement, improvement efforts, and other factors <u>involved in implementing a program and monitoring its effectiveness</u>. <u>As detailed in the introduction to Section 3, These measures are developed from the program's goals and objectives and should not be considered individually.</u> To evaluate PacifiCorp's lifeline program it is necessary to consider the individual results obtained from the different measures and identify possible relationships between these results.

<u>To review</u>, <u>The the goal of PacifiCorp</u>'s lifeline program is to assist low-income recipients in the purchase of electricity. The Commission ordered the implementation of such a program <u>considering</u>, <u>stating its conviction</u> that:

- A real need exists that is not met by other programs
- The program would not overly burden other customers
- The benefits offset the negative impacts
- The program is simple and inexpensive to administer

The program design provides a monthly \$8.00 credit to eligible recipients\_<u>and is\_and</u> <u>is\_funded</u> by monthly surcharges to donating ratepayers. The amount to be <u>collected</u> <u>distributed</u> is capped at \$1,850,000 per year.

The Division has requested that R.W. Beck use results for measures proposed in the previous section to evaluate the program, determining the program's current levels of success and effectiveness. The following section:

- Summarizes initial conclusions related to the program's effectiveness, as well as the effectiveness of applying measures at this point in the data collection process.
- Details a current analysis, including evaluation narratives that interpret the results and comment on factors that may affect efforts to strengthen the measurement inventory and refine the evaluation strategies.

## 5.1 Analysis Summary

The Division has requested that the program be evaluated using the measures proposed in the previous section and that these results be used to determine the program's success and effectiveness. As requested, R.W. Beck reviewed results from applying the proposed measures to existing data. Details from that analysis follow this summary, discussion.

In summary, a few of the results suggest that the program is going through predictable start-up challenges. For example, Othercurrent results suggest that although penetration is progressing steadily, though there is still a notable discrepancy between the targeted number of participating customers and the current recipient rolls. While



such penetration lags are one of the most predictable program start-up challenges, the fact remains that, at this point in the program, donors are being required to provide more funds collected than are actually required to benefit program recipients, and funds distributed.

The results of the measures suggested by the Commission cannot be directly attributable to the program, but might be used as "red flags" to provide insight in the program evaluation. Most results are currently muddled by erratic data. And there is a strong probability that the whole picture is muddled by erratic economic trends inside and outside the utility industry. Even in the cases where data is available, such as results of measures suggested by the Commission, these outcomes cannot be directly attributed to the program.

Taking all of this into consideration, R.W. Beck finds that there is currently insufficient data to conduct an adequate evaluation—and even the most concrete measures will best be employed as "red flags". Such "red flag" indicators could at least help program evaluators identify areas that may merit deeper investigation to determine whether the indicated problem or trend is affecting the targeted low-income customer population. and At this time, As such, R.W. Beck finds that—is it is not possible, at this time, to determine if whether or not the program is an overall success, at this time and that it will be most appropriate to allow two years of data to accrue before a full evaluation is undertaken. or not.

<u>PATTY \*\*\*</u>] Specifically, the The program has been in place for just over one year and the only <u>proposed and ready</u> measures with data for this time are the measures suggested by the Commission, as well as accrued interest, account balance, penetration and energy consumption. The first months of data for these measures do not reflect an accurate picture, because <u>for</u> the program's <u>recipient</u> participation had not stabilized. <u>Further, results of the Commission's measures and because the results</u> are not directly attributable to the program. <u>Part of these measures' value depends on being able to assume that data for other customer groups would remain relatively stable. In that context, trends in arrearages, etc, might reasonably be attributed to the program. However, recent adjustments in the local and national economy have produced challenges within all customer groups that obscure the impact of such a relatively small population.</u>

There is also some data available for measures that have been found to be applicable, but data or design is challenged. In particular, these measures include those that focus on the fiscal impact of the program on donors in terms of lost investment opportunity and pre or post-tax contributions. While it is clear that there are already direct and indirect impacts on the donors (\$1.9 M has been collected) R.W. Beck finds that both of these particular measures for that impact are currently data and design challenged. Also, R.W. Beck finds that it would be inappropriate to fully interpret donor impacts until they can be viewed in the context of a balancing offset of outcomes from a stable (versus startup) lifeline program.

The additional measures proposed do not have any history. and And, while this dataey can be tracked monthly, quarterly and yearly, R.W. Beck recommends that the major a comprehensive program evaluation not be conducted until at be deferred for at least two years to help ensure that an appropriate level of data for each measure is available

for analysis. This This time-frame would allow for the stabilization of plan recipient numbers and may provide a more accurate overall perspective of the program.—by considering more than one year of data, This approach would also help avoid problems that could develop if rather than allowing the volatility of energy prices during the winter of 2000-2001 is allowed to skew the results. In addition, addition, a deferred analysis would improve chances that important data, currently unavailable for certain measures, could be collected and therefore included in the analysis.

[PATTY\*\*\*] In recommending a deferred evaluation, R.W. Beck does not deny that there are significant impacts already accruing to both recipients and donors. However, as discussed earlier, R.W. Beck finds that it would be ill-advised to fully interpret either set of impacts until they can be viewed in the context of balancing information for both sides, as could be available through a stable (versus startup) lifeline program. Further, R.W. Beck cautions against spending too much energy on broad assertions of benefits or costs, in light of how insignificant this program and it numbers are in relation to the state or national economy. However, the program has been in place for one year and the results obtained from the measures will be reviewed.

# 5.2 Analysis Details

As described earlier, R.W. Beck analyzed the results from applying proposed measures to the existing data (Section 4) and developed the following evaluation narratives to summarize findings on program effectiveness, as well as analytic challenges.

For the sake of clarity, the evaluation presents the measures in relatively the same order as they are presented in Section 4. However, since some are combined, the order is not exact.

## 5.2.1. <u>Commission's Measures</u>

The six months (April 2001 – September 2001) of data analyzed for the measures proposed by the Commission, illustrate that arrearages, the number of termination notices and accounts sent to collection agencies and written-off accounts have tended to increase. As described in the previous section, these measures might be best applied as "red flags" or general indicators, since their attributability to the program is difficult to determine. It is not accurate to say that the program is unsuccessful or successful, based on the results without considering additional information such as the volatility of the energy prices for 2000-2001 and at least one more year of program data. The same can be said for reconnections, since only one reconnection was performed during the time frame reviewed. The ratio of recovered accounts to written-off accounts remained fairly stable until September of 2001, when it experienced a sharp decrease.

### 5.2.2 Account Balance, Accrued Interest, Penetration

During its first year of implementation the program collected \$1,897,652 and \$1,044,260 was distributed to program recipient recipients. This difference is influenced by the fact that, during the first six months of the program, the number of

recipients had not stabilized. The number of recipients for the latter five months of the program increased and tended to remain stable, however a sharp decrease in participation was experienced in September 2001.

The measure results also indicate that 42% participation was not reached during this year, even when the number of program recipients had stabilized in the second semester.

The following table shows the amount that <u>cw</u>ould be distributed to <u>recipient</u>recipients. The calculation uses two reference points:

■ using Tthe amount that would be distributed based on the average number of recipients that are recorded for the five months mentioned above, when where participation had tended to stabilize, and the amount that would be distributed if program participation reached 42%.

Table 5.1 Program Participation and Credit Distribution

	Oct 2001-Sept 2002
Average number of recipients (stable mos)	16,514
Percent of participation	34%
Amount distributed at \$8 per recipient	\$132,112
Total distributed in 12 months	\$1,585,344
Number of reginients, at 420/ participation	20.226

Number of recipients at 42% participation	20,226
Amount distributed at \$8 per recipient	\$161,808
Total distributed in 12 months	\$1,941,696

At 34% percent participation, the program would still have funds available for distribution. If the targeted 42% participation were to be reached, the fund to be distributed surpasses the amount of the established cap.ped amount

<u>In addition</u>, <u>The the</u> amount collected during this year is within the upper range for the standard defined for this measure. Since <u>it is projected that</u> the number of recipients will be stabilized <u>over the coming months</u>, the data for the second year of the program will be useful in evaluating the account balance. If this balance exceeds or is under the standard range, further analysis will be required to determine the causes of this result.

In regards to penetration, the Task Force defined the 42% participation rate <u>as an appropriate and acceptable target</u>. Considering the information provided by Table 5.1, it is Beck's recommendation that this standard be reviewed to reflect a more accurate <u>and sustainable</u> participation rate. A 38% participation rate, <u>based on the applied to the total of 48,157</u> eligible recipients, would <u>provide require that</u> a total amount of \$1,756, 767 <u>be</u> available <u>for to cover</u> distribution and administration expenses.

Another topic to consider is the interest that the fund is accruing. During the first year of the program, approximately \$5,000 was accrued. This amount remains in the program and may be considered for a rebate to recipients or for developing a mechanism that rolls back the monthly surcharges based on the interest gained. A more detailed assessment is required to determine the benefits and/or detriments of changing the program design to include these mechanisms.

# 5.3 Related Analysis of Other Measures

The six months (April 2001 – September 2001) of data analyzed for the measures proposed by the Commission, illustrate that arrearages, the number of termination notices and accounts sent to collection agencies and written-off accounts has tended to increase. It is not accurate to say that the program is unsuccessful based on these results without considering additional information such as the volatility of the energy prices for 2000-2001 and at least one more year of program data. The same can be said for reconnections, since only one reconnection was performed during the time frame reviewed and for the ratio of recovered accounts to written-off accounts. This ratio remained fairly stable, but in September of 2001 experienced a sharp decrease.

## 5.3.1 <u>"Baselines"</u> for Recipient-Specific Data

The data provided by PacifiCorp shows that many aspects of the data gathering process were still being defined during the initial six months of the program. At the facilitated session, the\_interested parties suggested that it would be difficult to draw meaningful conclusions about recipient impacts, unless we can comparing compare the results of the related program measures with "a baseline" of results for the year previous to the program. the previous year. In particular, Group members at the facilitated discussion discussed this issue in the context of data needed to analyze energy consumption patterns and the electric energy cost burden.

While R.W. Beck concurs that a data "baseline" would be ideal, there is a classic "apples to apples" type challenge that needs to be resolved. First, none of the data that is currently available for the previous year differentiates between program recipients and other residential customers. As such, it is not currently possible to complete an accurate comparison between the two years' data, using this distinction. This comparison would not be accurate since the data available for the previous year does not differentiate between program participants and other residential customers.

R.W. Beck suggests that More more accurate results will could be obtained by waiting until we have additional data and then comparing the program's initial year with the data to be gathered from October 2001 – September 2002.

## 5.3.2 Other Recipient Specific Impacts

In addition to the data challenges outlined just above, Group members at the facilitated discussion identified challenges with collecting very personal, but important, data for each participating household. Specifically, the discussion highlighted the need to determine incomes or relatively close income ranges for each household (related to Median Electric Energy Cost Impact) and to identify the issues associated with why program recipients leave the program rolls and/or return (related to Program Stability).

Though this evaluation does not have any recommendations for getting at the analysis any other way, this discussion is included to highlight some of the more relevant data challenges, as they relate to ensuring that the Commission's adopted program is fulfilling one core criteria: Effectively assessing and addressing a real need.

<u>PATTY \*\*\*\*</u> Further, it is important to maintain a perspective for all of these measures that includes the fact that the size of this program and the dimension of its fiscal impacts are insignificant when compared with the size of economy in Utah or the nation. In this larger context, it is very challenging to determine whether the benefits derived from the lifeline program exceed its costs. Such an assertion would require a much more extensive economic model than can be developed through this endeavor. Further, it would be dubious that the effort required to build such a model would be a meaningful investment in the face of this program's limited scope.

# 5.3.3 <u>Measures Related To Donor Non-Participant Donor Impacts</u>

The majority of the measures selected proposed provide information about the program's impact for recipients. The account balance measure may be used to illustrate the program's impact on the donors donors and recipients. The result of this measure shows that approximately \$1,900,000 was collected from the donordonors and only \$1,044,000 was distributed to recipients, which is a notable discrepancy between funds collected and funds distributed. This discrepancy may, in part, be due to the predictable start-up challenges the program experienced during the first year. During the program's first months, the number of recipients had not stabilized. Data from the second year of the program will provide a more accurate picture of the this impact to the donor and help determine potential program flaws.

ATTY \*\*\*]Two additional measures, the donordonors' s—missed investment opportunity and the after and pre-tax contribution comparison, could have the potential to provide information regarding the impact to program donordonors. While it is clear that there are already direct and indirect impacts on the donors (over \$1.8 M has been collected), R.W. Beck finds that both of these particular measures for that impact are currently data and design challenged. Also, R.W. Beck finds that it would be inappropriate to fully interpret donor impacts until they can be viewed in the context of a balancing offset of outcomes for recipient and business cost measures that will only be available from a stable (versus startup) lifeline program. As described in other

areas of this section, it will likely require additional time to ensure that the program and the measurement system are stable, especially as it applies to penetration and data sourcing.

<u>PATTY \*\*\*</u>] If these two donors measures were to be applied at this point, without adjusting the design or data, R.W. Beck finds that the evaluation should include consideration of related factors, including the very low level of monthly surcharges for individual customers. Even though these measures have data challenges associated with them, they R.W. Beck finds that an assessment of related factors, including the level of monthly surcharges for individual customers, In this context, R.W. Beck's initial finding for this element of the program is that the neither the individual surcharge (\$0.12 -\$6.00/month), nor the aggregate impacts (\$1.9M to \$2.0M per year for lost investment opportunity and \$84,576 for pre-tax contribution) illustrates that the program may not may not overly burden the ratepayers who contribute through the surcharge contribute to a program that is providing a current individual benefit of \$8 per month and an aggregate impact of \$1M per year.

However, given the insignificant size of the program to Utah's economy or the national economy, it is impossible to determine whether the benefits derived from the lifeline program exceed its costs.

## 5.3.4 Measures Related to Utility Business Costs

The measures selected proposed do not provide a solid evaluation of the impact to the utility. The current challenge involves the fact that PacifiCorp does not track the information required to measure the cost of the business processes analyzed (e.g., the cost of dealing with returned checks). Therefore it is recommended that the impact to the utility is monitored based on those measures where an increase or decrease of the number of processes handled per program recipient can be determined and the assumption that and it can be assumed that the costs associated with the processes will vary in the same way.

Once the current data is more complete, such a general analysis can be conducted as it relates to trends in expensive business transactions, such as collections, arrearages, terminations and reconnections, etc. However, the challenge of attributing the impacts to the program will remain a function of the relative stability of the utility's microeconomy, as well as the general economy.

#### 5.3.5 Qualitative Measures and Related Externalities

The Division and interested parties Group members attending the facilitated discussion agreed that further there is a need for further clarification and discussion of qualitative measures and related externalities that may be helpful in future evaluations of the lifeline program. is Specifically, the Division and Group members agreed to further discuss the following:

An outline for the Division's overall report, including how it will incorporate some or all of the measures from this report as one of its analytic elements;

- A list of qualitative factors for the Division to consider and address as part of its analysis of the program's overall effectiveness, including how local and macroeconomic, social and political conditions may be affecting or masking program outcomes;
- On-going efforts to resolve some of the more puzzling data and design challenges associated with quantitative measures, including:
- Recipient data on income, energy consumption and program enrollment patterns; as well as
- Attributable, accessible data on broader economic and social impacts from the subsidy and/or the surcharge.
- A set of related factors to incorporate into surveys on recipient and non-recipient attitudes and perspectives (also strategies to design and administer such a survey in a meaningful and affordable fashion).

<u>In relation to this report, R.W. Beck notes</u> that these <u>These</u> interactions might lead to the discovery of additional measures or new sources of information for the <u>selected proposed</u> measures.

# 5.4 Closing Comments

Measurement systems are, by definition, dynamic. They need to be reviewed and updated based on the circumstances and environment in which they are inserted. The measures included in this report are an initial effort to evaluate PacifiCorp's lifeline program. To offer any real value, these measures will need to be tuned-up and maintained.

R.W. Beck agrees with the Task Force recommendation in that more than one year of data needs to be considered to perform the overall evaluation of the program's effectiveness. However, the results obtained from the implementation of the selected proposed measures provide some information regarding the program's current performance and design.