EVALUATING THE NEW HAMPSHIRE ELECTRIC ASSISTANCE PROGRAM:

Proposed Utility Evaluation Criteria

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The indices outlined below represent mechanisms to use in *measuring* the performance of the New Hampshire's EAP throughout the its early years. 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:

- A measurement of the *amount* of bill payment;
- A measurement of *prompt* payment of bills;
- A measurement of *regular* payment of bills;
- A measurement of *complete* payment of bills;
- A measurement of *continuing* payments (through contribution to fixed costs);
- A 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) (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.[1]

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] (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

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[1] In 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.

[2] 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.

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

Index #6: **<u>Improved Universal Service Performance</u>:** 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:[3]

a. **<u>Termination Rate</u>:** 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. **<u>Money at risk index</u>:** 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. **<u>Deferred payment agreement success</u>:** 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. **<u>Weighted arrears</u>:** 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

[3] 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*.

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 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, in fact, "net back" combines "effectiveness" and "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.