JERROLD OPPENHEIM
57 MIDDLE STREET
GLOUCESTER, MASSACHUSETTS 01930-5736 USA
+1 (978) 283-0897
Fax +1 (978) 283-0957
JerroldOpp@DemocracyAndRegulation.com
www.DemocracyAndRegulation.com

May 30, 2006

Mary Jo Kunkle, Executive Secretary
Michigan Public Service Commission
P.O. Box 30221
6545 Mercantile Way
Lansing, Michigan 48909-7721

RE: SEMCO Energy Gas Co., GCR, Case No. U-14718 (e-file/paperless)

Dear Secretary Kunkle:

Enclosed for filing are the TESTIMONY OF NANCY BROCKWAY FOR PAYS AMERICA, INC. . and the TESTIMONY OF HARLAN LACHMAN FOR PAYS AMERICA, INC.

PAYS America, Inc. is a petitioner to intervene in this proceeding, with an appeal to the Commission pending of the Administrative Law Judge's denial of its petition to intervene. PAYS America Inc. files this testimony to avoid having its appeal become moot due to the passage of the deadline for the filing of testimony.

Please contact one of us if there are any questions.

Respectfully,

Signature Not Verified
Elizabeth Dahl MacGregor, Esq.
Digitally signed by Elizabeth Dahl MacGregor, Esq.
DN: cn=Elizabeth Dahl MacGregor, Esq., c=US
Date: 2006.05.30 14:58:42 -04'00'

Elizabeth Dahl MacGregor (P64386)
2154 Washtenaw Ave., Ypsilanti, MI 48197
(734)485-1295, (734)485-1142 (fax)
Liz@YpsiLawyer.com

Signature Not Verified
Jerrold Oppenheim, Esq.
Digitally signed by Jerrold Oppenheim, Esq.
DN: cn=Jerrold Oppenheim, Esq., c=US
Date: 2006.05.30 15:01:02 -04'00'

Jerrold Oppenheim
Massachusetts Board of Bar Overseers No. 545820
Illinois Attorney Registration No. 2114216

STATE OF MICHIGAN

Before the
MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of	)	
SEMCO ENERGY GAS COMPANY	)	
for authority to implement a gas cost	)	Case No. U-14718
recovery plan and factors for the 12-month	)	(e-file/paperless)
period of April 2006 through March 2007.	)	

TESTIMONY OF NANCY BROCKWAY

FOR PAYS AMERICA, INC.

May 30, 2006

STATE OF MICHIGAN

Before the
MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of	)	
SEMCO ENERGY GAS COMPANY	)	
for authority to implement a gas cost	)	Case No. U-14718
recovery plan and factors for the 12-month	)	(e-file/paperless)
period of April 2006 through March 2007.	)	

TESTIMONY OF NANCY BROCKWAY
FOR PAYS AMERICA, INC.

Q. PLEASE STATE YOUR NAME, AFFILIATION, AND ADDRESS.

A. Nancy Brockway, 10 Allen Street, Boston, Massachusetts 02131. I am chair of the Board of PAYS America, Inc., Petitioner to Intervene in this proceeding.

Q. PLEASE DESCRIBE YOUR EXPERT QUALIFICATIONS?

A. I have been involved in the regulation of electric and other public utilities since the early 1980's. I served as Commissioner of the New Hampshire Public Utilities Commission and General Counsel of the Massachusetts Department of Telecommunications and Energy. I have served as a hearing officer and counsel to two Commissions, and have presented expert witness testimony on utility matters before 12 regulatory commissions in 37 cases.

As Commissioner, or advising Commissioners, I participated in about 30 cases involving gas commodity charges. My recent natural gas experience includes the preparation of testimony to be filed in the Pennsylvania Public Utilities Commission docket examining the proposed merger of PG Energy and UGI Corp., the presentation of testimony to the New Jersey Board of Public Utilities in the proposed Exelon/PSEG merger docket, and the presentation of testimony in a recent BayState Gas rate case before the Massachusetts Department of Telecommunications and Energy. I am an expert in utility energy efficiency policy, with experience back to 1983 in such issues. In addition to chairing the Board of PAYS America, Inc., I am the principal and owner of NBrockway & Associates, a utility and energy consulting practice.

Q.. WHAT IS THE SUBJECT OF YOUR TESTIMONY?

A. The subject of my testimony is how SEMCO's failure to manage its demand results in unnecessarily high costs for gas, and how SEMCO's five-year Plan in this case overstates the forecast demand for gas and the associated cost of such gas.

Q. PLEASE EXPLAIN HOW SEMCO'S FAILURE TO MANAGE ITS DEMAND MANIFESTS ITSELF IN ITS PLAN FILED IN THIS CASE?

A. SEMCO's five year demand forecast treats demand as static, as if there were nothing SEMCO could do to moderate demand and thus lower costs for its customers. Accounting for the impact on load of utility

demand-side management (DSM) programs, as well as customer efficiency, has long been an established standard practice in the forecasting of demand in a gas supply case. (*E.g.*, *Boston Gas Co., et al.,* D.P.U./D.T.E. 97-81 (Mass., 2000)) But SEMCO's forecast does not include any utility-facilitated demand reduction strategies. Indeed, Mr. Alger recognizes in his testimony that customers want to use gas more efficiently (*see* Direct at 9), thus acknowledging that customer actions can reduce demand, but he fails to address the barriers to their doing so.

Q. PLEASE EXPLAIN WHAT YOU MEAN BY DEMAND REDUCTION STRATEGIES?

A. As an element of prudence in its plan for gas supply and cost, SEMCO is obliged, pursuant to M.C.L. sec. 460.6h, to "in light of the major alternative gas supplies available to the utility," take "all appropriate legal and regulatory actions to minimize the cost of purchased gas." One major source of gas supply available to the utility is the supply of gas released by efficiency initiatives, the adoption of which requires the utility to take appropriate legal and regulatory actions.

It has long been understood that market barriers prevent economic efficiency investments. There is a tremendous amount of efficiency that could reduce demand, and hence gas prices, if market barriers were overcome. A recent national meta-analysis found that if all potential economic gas efficiency investments were made they would result in

efficiency savings of 22%. (S. Nadel, *et al.,* "The Technical, Economic and Achievable Potential for Energy-Efficiency in the U.S. – A Meta-Analysis of Recent Studies," *Proceedings of the 2004 ACEEE Summer Study on Energy Efficiency in Buildings,* American Council for an Energy-Efficient Economy.) The PAYS® system, described in more detail in the Testimony of Harlan Lachman, is an energy-efficiency strategy SEMCO could take to discharge its obligations under this provision of Michigan law.

Q. PLEASE EXPLAIN THE IMPACT ON COSTS TO CUSTOMERS OF SEMCO'S FAILURE TO ARRANGE FOR AND FORECAST DEMAND REDUCTIONS?

A. SEMCO'S cost of storage is excessive. The amount of storage SEMCO needs is a function of its requirement to meet demand on peak days. Thus, the higher SEMCO's peak demand, the greater its requirement for storage. SEMCO leases its storage (Mr. Fitzgerald's Direct Testimony at 6 *et seq.* and Exh. WEF-2), so reductions in SEMCO peak demand translate fairly quickly to lower costs: lower demand requires less storage and thus SEMCO's costs to purchase gas go down as gas demand decreases, resulting in savings to ratepayers.

Q. CAN YOU PROVIDE AN EXAMPLE OF A CASE IN WHICH LOWERED DEMAND COULD HAVE SAVED GCR COSTS?

A. Yes. In SEMCO recently extended the 1.5Bcf (30,000 Dth/day) storage agreement with ANR for three years commencing April 1, 2006. This extension cost ratepayers an additional $324,514. (Fitzgerald at 8-

9.) The extension was purchased to avoid more costly spot gas purchases (*ibid.).* Efficiency could have reduced the demand for these supply options. Avoiding spot purchases to the extent feasible is important, but lowering overall demand would permit lowering *both* spot *and* storage costs by lowering the total amount of gas required.

Q. HOW DOES SEMCO'S PLAN FORECAST RELATE TO ENERGY EFFICIENCY?

A. SEMCO's forecast includes assumptions about peak demand. SEMCO stores enough gas to cover peak demand. The fact that SEMCO leases its gas storage facilities, rather than owning them, means that SEMCO's forecast directly relates to its cost for gas. Leasing gives SEMCO the flexibility (within its lease terms) to adjust the amount of storage for which it pays based on the peak demand SEMCO estimates.

Q. WHAT GAS COSTS ARE AVOIDABLE THROUGH THE USE OF COST-EFFECTIVE ENERGY EFFICIENCY?

A. Avoidable costs include the costs of storage (injection, retrieval, and financing), as well as of the gas itself. Studies show that reducing demand has a downward impact on the price of gas itself, especially when gas supply is as constrained as it is today. For example, a relatively modest investment in efficiency in the Midwest could reduce Chicago Hub average natural gas prices by 13% over nine years. (M. Kushler, *et al.,* "Examining the Potential for Energy Efficiency to Help Address the Natural Gas Crisis in the Midwest," American Council for an

Energy-Efficient Economy, Report U051, Jan. 2005.) Yet SEMCO offers no utility-facilitated strategy to reduce the peak demand for its gas.

Q. PLEASE QUANTIFY THE COST SAVINGS.

A. It would not be appropriate, or even possible, to quantify cost savings in this case since no particular action is to be ordered by this Commission. Rather, the commission should order the utility to take all appropriate steps and cost-justify its actions (or lack of same) in the next GCR proceeding. In any event, no discovery has been allowed to PAYS AMERICA in this case, so I do not have all the facts needed to project even possible savings. However, gas storage costs for SEMCO are a significant part of its GCR costs. If they can be reduced cost-effectively, the cost of gas will be reduced as well.

Q. IS IT NECESSARY TO ORDER SEMCO TO ADOPT PAYS® OR ANY OTHER PARTICULAR EFFICIENCY PROGRAM?

A. No. The statute does provide, however, that in a GCR case,

> "The commission may also indicate any cost items in the 5-year forecast that on the basis of present evidence, the commission would be unlikely to permit the gas utility to recover from its customers in rates, rate schedules, or gas cost recovery factors established in the future."

Thus in this GCR Plan case the Commission may, consistently with its precedent against ordering utilities to undertake specific efficiency programs or passing efficiency costs through the GCR, provide SEMCO with the tools it needs to undertake the PAYS® approach, and provide an incentive for it to pursue all cost-effective efficiency initiatives. It would

do so by stating its likely future unwillingness to allow recovery for a portion of gas storage costs unless the utility takes appropriate legal and regulatory actions to initiate efficiency programs (such as, but not limited to, the PAYS system).

Q. WHAT DO YOU RECOMMEND THAT THE COMMISSION DO IN THIS GCR PLAN DOCKET?

A. I recommend that the Commission warn SEMCO that its prudence with respect to pursuing energy efficiency to reduce demand and demand-related gas costs will be reviewed in future GCRs under this Plan, and, if it is found that SEMCO has failed to take all reasonable steps necessary to reduce demand and associated gas costs, then the Commission will not permit such imprudent costs to flow through to ratepayers in the next GCR case. Specifically, I recommend that the Commission put SEMCO on notice that its five-year forecast is inadequate, that leased storage costs are likely excessive, and that if SEMCO fails to take appropriate steps to pursue efficiency, its future recovery through GCR plan proceedings could be jeopardized.

Q. WHY DO YOU PROPOSE THAT THE COMMISSION PUT SEMCO ON NOTICE THAT ITS FIVE-YEAR FORECAST IS INADEQUATE, THAT LEASED STORAGE COSTS ARE LIKELY EXCESSIVE, AND THAT IF IT FAILS TO TAKE APPROPRIATE STEPS ITS FUTURE RECOVERY THROUGH GCR PLAN PROCEEDINGS COULD BE JEOPARDIZED?

A. The purpose of a GCR Plan hearing is to ensure a utility's ability to pass on to customers its reasonable costs of purchasing gas. By the same token, GCR proceedings are designed to discourage passing on to

customers costs that are not reasonable. In SEMCO's situation, since it leases storage, lowering demand would directly lower its cost for gas and so lower its customers' costs. As long as the cost for the actions needed to lower demand are less than the avoidable costs of storage and energy, customers are better off if the actions are taken. SEMCO's failure to take cost-effective steps to reduce demand is a failure to operate in its customers' interests.

Q. YOU HAVE MENTIONED THE PAYS® SYSTEM. WHAT ACTIONS ARE YOU PROPOSING THE COMMISSION TAKE IN THIS CASE WITH RESPECT TO PAYS®?

A. I propose that the Commission authorize SEMCO to file the tariffs that constitute the basis of the the PAYS® system as outlined in Harlan Lachman's testimony. As I noted earlier, I am not suggesting that the Commission order adoption of any program in this case, nor am I asking that the commission approve any cost recovery in this case. The approval of the proposed tariffs will give SEMCO the legal basis for pursuing the PAYS® system without further delay, while not requiring require SEMCO to adopt the PAYS® system. At the same time, I recommend that the Commission (a) condition future recovery of storage costs on a showing by the utility that it has taken "all appropriate legal and regulatory actions to minimize the cost of purchased gas," and (b) remove barriers to one such action by authorizing (but not requiring) implementation of PAYS® tariffs.

SEMCO may conclude that PAYS® is a good way to reduce demand. But if it did, and chose to adopt a PAYS® program, SEMCO would not be able to implement the PAYS® system without Commission authorization of the requisite tariffs. Thus, by authorizing PAYS® tariffs in this docket, the Commission can give SEMCO a ready tool with which it can reduce its five year demand forecast, as a result reduce its leased storage costs, and thus reduce the SEMCO costs of gas that are passed on to ratepayers.

Q. ARE THERE ADVANTAGES TO RATEPAYERS OF THE COMMISSION AUTHORIZING PAYS® IN THIS CASE INSTEAD OF LATER?

A. Yes. By authorizing PAYS® in this docket, as I recommend, the Commission would help SEMCO avoid development costs (such as drafting tariffs, forms and contracts; conducting a separate case before this commission; finding a certification agent; and locating a capital provider), since PAYS AMERICA has already performed this groundwork in preparation for possible Commission authorization in this case.

One reason PAYS® is a very-low cost efficiency initiative for the utility is that, as described in Mr. Lachman's testimony, PAYS AMERICA has already performed most of the development work required. Another is that PAYS® is an effective method of leveraging ratepayer investments in efficiency measures that are extremely cost-effective for ratepayers. For example, one recent study shows that, conservatively, for a consumer

replacing a low-efficiency (60%) gas furnace with a very-high-efficiency (90%) Energy Star furnace – a 33% increase in efficiency – the average return is 19%. (The Consumer Energy Council of America, "Smart Choices for Consumers: Analysis of the Best Ways to Reduce High Heating Costs," Washington, D.C., Nov. 2005.)

Q. WHAT IS THE BASIS FOR YOUR ASSUMPTION THAT THE COST OF REDUCING DEMAND IS LESS THAN THE AVOIDABLE COSTS OF THAT DEMAND?

A. Demand reduction avoids costs of both demand and energy. In this instance, the avoidable cost of demand includes the avoidable cost of gas storage at the time of system peak. By comparison, as described in the Testimony of Harlan Lachman, it is possible for SEMCO to set up the PAYS® system now at little or no cost to ratepayers. Thus, the cost of reducing demand using PAYS® would be less than the cost of demand avoided by the associated energy efficiency.

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS TO THE COMMISSION?

A. I recommend that the Commission:

1. Pursuant to M.C.L. sec. 460.6h, condition SEMCO's future recovery of storage costs on a showing by the utility that it has taken "all appropriate legal and regulatory actions to minimize the cost of purchased gas" by taking all appropriate actions to reduce the peak demand for gas, including specifically the pursuit of all cost-effective energy efficiency, and

2. Remove the barriers to adoption of the PAYS® initiative by authorizing (but not ordering) the PAYS® tariffs described in the Testimony of Harlan Lachman.

Q. DOES THIS COMPLETE YOUR TESTIMONY?

A. Yes, it does.

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of SEMCO ENERGY GAS COMPANY for authority to implement a gas cost recovery plan and factors for the 12-month period of April 2006 through March 2007	)))))	Case No. U-14718

DIRECT TESTIMONY & EXHIBIT OF

HARLAN LACHMAN, PRESIDENT; ENERGY EFFICIENCY INSTITUTE; INC.

FOR

PAYS AMERICA, INC.

May 30, 2006

STATE OF MICHIGAN

Before the
MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of	)	
SEMCO ENERGY GAS COMPANY	)	
for authority to implement a gas cost	)	Case No. U-14718
recovery plan and factors for the 12-month	)	(e-file/paperless)
period of April 2006 through March 2007.	)	

TESTIMONY OF HARLAN LACHMAN
FOR PAYS AMERICA, INC.

Q. **PLEASE STATE YOUR NAME, YOUR AFFILIATION, AND YOUR BUSINESS ADDRESS?**

A. My name is Harlan Lachman. I am the President of the Energy Efficiency Institute, Inc. (EEI). EEI was incorporated in Vermont in September 1988. Our corporate address is 165 Goodsell Point, Colchester, Vermont 05446. EEI has been retained by PAYS America, Inc. (PAYS America) to present expert testimony in this case.

Q. **WHAT WAS YOUR POST SECONDARY EDUCATION?**

A. I received my BA from Columbia College at Columbia University in 1972. I received a Masters Degree from Teachers College at Columbia University in 1974.

Q. **WHAT IS THE NATURE OF THE WORK DONE BY THE ENERGY EFFICIENCY INSTITUTE?**

A. EEI has been demonstrating innovative approaches to demand-side management (DSM) and energy efficiency since its inception. We are the originators of the Pay As You Save® (PAYS®) system. Paul A. Cillo and I are the principals of the firm and have more than fifty combined years of field, program implementation, and program design experience. We have supervised the work

of auditors and field specialists performing energy analyses in thousands of homes and have personally done energy analyses in hundreds of homes, small and large commercial facilities, schools, hospitals and colleges. We have designed and managed low-income fuel assistance and weatherization programs, Vermont's Award winning Residential Conservation Service (RCS) Energy Auditing and Arranging Service Programs, and award winning utility DSM Programs for the Burlington Electric Department (BED), a Vermont utility.

Q. **WHAT IS YOUR SPECIFIC EXPERIENCE WITH THE PAYS® SYSTEM?**

A. I originated the Pay As You Save® system with my partner, Mr. Cillo. We began developing the system in 1998 during program energy efficiency design work for BED which was interested in the potential of using an energy services charge to effect customer purchase of energy efficiency without rebates or with much lower rebates.[1] We were commissioned by the National Association of Regulatory Utility Commissioners (NARUC) to describe the PAYS® system in a paper published in December of 1999, "Pay As You Save® Energy Efficiency Products, Restructuring Energy Efficiency." EEI was commissioned by NARUC to write a second paper, published in November 2001, about how PAYS® could be used to promote distributed generation, "More Distributed Generation with Pay As You Save®."

I have made numerous presentations on the PAYS® system in states throughout the country, including at several NARUC meetings, and before state Commissions. I presented information to the New Hampshire Public Utilities Commission (NHPUC) on January 4, 1999 when Mr. Cillo and I were hired to prepare and present an explanation of the PAYS® system for the Commission and its staff. On November 1, 2000, the NHPUC issued Order No. 23,574 in which it ordered two utilities, Public Service Company of New Hampshire (PSNH) and New Hampshire Electric Coop (NHEC), "to cooperate with GOECS[2] and implement a pilot PAYS Program, beginning with PSNH and the New Hampshire Electric Cooperative..." (p. 19)

[1] BED offered its customers a number of programs, most offering large rebates to convince customers to purchase efficiency products they would not otherwise purchase.

[2] Governor's Office of Energy and Community Services

In 2001, EEI was hired by PSNH and NHEC to work with the parties to develop PAYS® pilots. Mr. Cillo and I ran focus groups for each utility and authored a detailed pilot design that was approved by the utilities and the other parties (including the Governor's Office of Energy and Community Services, the Office of Consumers Counsel, and the Attorney General and filed before the NHPUC on April 12, 2001. The NHPUC approved implementation of these pilots on November 29, 2001 in Order No. 23,851.

In the next several months, EEI worked with staff at both utilities to help them implement their pilots. PSNH began implementation in January of 2002. NHEC began its pilot on May 31, 2002.

In 2003, these pilots were evaluated by GDS Associates, Inc. (GDS) in accordance with the evaluation protocols EEI established in the April 12, 2001 pilot design. GDS released its evaluation, "Process Evaluation of the Pilot 'Pay As You Save®' (PAYS®) Energy Efficiency Program" in December 2003.[3] Some of the highlights from the evaluation included:

> "In general, it can be concluded that the PAYS concept *is* resulting in getting those customers that participated to install more energy efficiency measures than they otherwise would have done." (p. 7)
>
> "All feedback that NHEC PAYS pilot administrative staff have received from their participating members was noted to be very positive: 'If it wasn't [sic] for the PAYS program they would not have done these installations." (p. 35)
>
> "The program's greatest strength was noted to be that it allowed municipalities to install energy efficient measures with no upfront cost." (p. 43)
>
> "The NHEC PAYS lighting pilot was successful in overcoming the significant barrier of high first cost of energy efficient measures." (p. 73)
>
> "…it appears that the program is successful in addressing three key barriers: high first cost, information on energy efficient equipment, and difficulty in obtaining financing." (p 82)
>
> "Half of the participants (*PSNH*) responded that they would not have completed the project without PAYS and the other half noted that they would have only done some of the work." (p 86.)

[3] Evaluation is available at PAYS America's website

"The two major barriers that were effectively addressed by PSNH's municipal PAYS pilot were those of difficulty for municipalities to incur long-term debt obligations and high first cost. Another barrier that was noted to have been addressed was the uncertainty of energy savings…" (p. 86)

On December 30, 2004, in Order No. 24,417, the NHPUC ordered that, "That the PAYS® Programs as currently in effect at PSNH and NHEC be continued through 2007 in accordance with the modifications set forth above;" (p. 36)

In June, 2005 I co-wrote a paper, "Potential for Development of PAYS® in New York State" to the New York State Energy Research & Development Authority with Mr. Cillo and Fred Zalcman and Daniel Rosenblum of the Energy Project at Pace University. In it we described the essential elements of the PAYS® system and the regulatory approvals required to implement it, including an analysis of the legal authority to implement PAYS® basic elements.

Currently, in addition to our work with PAYS America in this Docket, I am working with Mr. Cillo with two municipalities in Michigan that are considering implementing the PAYS® system and with the Pace Energy Project on the "Pay As You Save® (PAYS®) Northeast Program Launch" which is partially funded by a grant from the Ittleson Foundation awarded to PAYS America to promote the PAYS® system in one or more Northeastern states.

Q. **WHAT ARE SOME OF YOUR SPECIFIC EXPERIENCES WITH ENERGY EFFICIENCY PROGRAM DESIGN AND IMPLEMENTATION OTHER THAN PAYS®?**

A. In 1980, I helped design Vermont's Residential Conservation Service (RCS) program. Vermont was the only state in the country to offer a non-utility funded, independent, statewide, energy audit. Mr. Cillo helped design the audit component of Vermont's RCS effort and set-up and managed the audit program. Audits were supplemented with a comprehensive arranging service provided by a non-profit agency funded by Vermont's utilities. Highly skilled technicians assisted homeowners interested in installing major measures. I set up and managed this agency from 1980 through 1985. We developed an innovative, on-site specification process that provided clients and contractors with standards specific to the desired work. The combined program of statewide audits

and arranging services received one of the Department of Energy's (D.O.E.) first Technology Transfer of the '80s Awards for Vermont's RCS effort.

In 1988, under a D.O.E. grant, I worked with Mr. Cillo in designing a seminar program for school managers called "Energy and School Management." Built on our years of experience analyzing energy consumption in schools and recommending options for improving energy efficiency, this seminar provided school administrators with the management framework to effectively manage energy in their schools. We presented the seminar to about 300 school administrators and personnel in four New England states. Additionally, we trained twenty individuals from other states to present this seminar to school administrators in their states. After the seminars, we worked directly with 24 schools on a pilot basis in Vermont helping them implement the management systems introduced in the seminar. The firm Mr. Cillo and I worked for, Energy Solutions, Inc. received a "Special Commendation for Excellence "from the Governor of Vermont for our work on this program. The state of Vermont continues to use elements of the Energy & School Management Program that we developed.

In 1990, I designed, set up and managed a utility residential on-site lighting program for BED that used elements we later incorporated into PAYS®. I trained college students to wrap electric water heaters and install water saving devices and to enroll customers in using compact fluorescent lighting. Program staff visited approximately 50% of BED's residential customers. At a total cost of less than $90 per visit (including administration, marketing and materials), more than 70% of those visited installed an average of 4.75 light bulbs and almost all electric water heaters were insulated. BED received the 1992 American Public Power Association Energy Innovator Award for this program.

I have also helped design, obtain funding for and manage a 1990 – 1991 D.O.E. demonstration program for BED with Mr. Cillo. This pilot program examined the feasibility of using innovative design mechanisms and supplemental fossil fuel heating systems to quickly and efficiently

eliminate residential electric heat's contribution to peak demand. The program evaluation (coordinated by Lawrence Berkeley Laboratory) indicated that 66% of those who were offered program services converted to an alternate fuel. The cost per saved peak kW was $635. BED received a 1992 D.O.E. Energy Innovation Award, Utility Technology Category, for its fuel-switching program.

In the early 1990s, EEI developed low income program designs that were implemented by four Texas utility companies (TU Electric, West Texas Utilities, Central Power and Light Company, and Entergy). These programs added electric savings measures (CFLs, refrigerators and air conditioners) to the existing D.O.E. funded weatherization programs and added utility funding to pay for traditional weatherization measures that were cost effective to the utilities. We used an innovative leasing mechanism and a modified audit to ensure that these programs passed the Utility Cost test of the California Standard Practice Manual[4]. We know of no other utility funded low income programs that passed this test.

Q. **HAVE YOU TESTIFIED OR SUBMITTED EVIDENCE TO THE MICHIGAN PUBLIC SERVICE COMMISSION OR TO PUBLIC UTILITY COMMISSIONS IN OTHER STATES?**

A. Although I have not testified before or submitted evidence to the Michigan Public Service Commission (MPSC), I did submit written comments in two proceedings (Case No. U-13808) and Case No. U-14667). Additionally, the Commission ordered two utilities to consider the PAYS® system (Case No. U-13808 and Case No. U-14347). These orders were based on the PAYS® materials I authored with Mr. Cillo that have been previously described.

In 2004, I helped prepare testimony presented by Mr. Cillo in Docket No.DE-04-052 before the NHPUC on behalf of New Hampshire Public Interest Research Group requesting the continuation

[4] A standard methodology for evaluating cost effectiveness of energy efficiency programs originally published in California in 1983 by the California Public Utilities Commission and updated in December 1987 and October 2001.

of the PAYS® system with some enhancements. This testimony resulted in the aforementioned NHPUC Order No. 24,417.

Mr. Cillo and I presented the aforementioned April 12, 2001 pilot design to the NHPUC that was approved in the aforementioned Order No. 23,851.

In 1993, I provided testimony to the Massachusetts Department of Public Utilities as the sole witness of the Office of the Attorney General on the performance by Commonwealth Electric Company and Cambridge Electric Light Company regarding their implementation of DSM programs. My testimony explained the value of establishing milestones for future DSM activity, arranging for independent evaluation of such DSM activity, and for implementing predetermined penalties in the event of continued mismanagement of DSM by these utilities. The Commission acknowledged the utility to be remiss in fulfilling its obligations and ordered steps to address its non-performance.

In 1993, I provided testimony to the Texas Public Utility Commission, focusing on the special needs of low-income ratepayers as part of a rate case for Texas Electric Utilities Company (now TXU Energy). My testimony included three cost-effective program designs and budgets that Mr. Cillo and I developed, targeting DSM services to low-income customers and addressed the impact of cost recovery, performance, and marketing decisions on low-income persons. The Commission determined that the utility's DSM programs had failed to overcome market barriers to participation by low income customers and ordered the utility to submit, in conjunction with interested parties, programs specifically designed to meet the needs of low income persons as part of its Integrated Resource Plan (IRP) submission. I then provided testimony during the IRP proceedings that resulted in the approval of these programs.

Q. **WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

A. The purpose of my Testimony is to support the Testimony of PAYS America's Chair, former New Hampshire Commissioner Nancy Brockway, by describing the PAYS system. My Testimony explains how PAYS® works by submitting and explaining two PAYS® tariffs that the Commission could authorize SEMCO to implement.

Q. **HOW WOULD SEMCO'S OFFERING A PAYS® TARIFF AS PAYS AMERICA PROPOSES ASSURE DEMAND SAVINGS THAT WOULD DIRECTLY IMPACT SEMCO'S FIVE YEAR FORECAST AND ASSOCIATED GAS COSTS?**

A. PAYS America is recommending MPSC approval for two tariffs (Exhibit HL-1), a residential tariff and a tariff for MUSH customers (Municipalities, Universities, Schools, and Hospitals facilities). The proposed residential tariff, if implemented as proposed, will result in residential customers purchasing new high efficiency furnaces and boilers and thereby increase the efficiency of their heating systems. Higher efficiency furnaces and boilers will require less gas to heat SEMCO customers' homes. Home heating has a high coincidence with winter peaking utilities' system peaks. SEMCO is a winter peaking utility so these systems when installed will reduce peak demand. Reducing peak demand will reduce SEMCO's need for gas at the time of its peak.

The proposed MUSH tariff will allow MUSH customers to install the most cost-effective efficiency measures in these buildings. The only measures that will qualify for the PAYS® tariff, as described below, are those which can save significant amounts of energy. For example, typical gas measures that will qualify in MUSH customers' facilities are heating system upgrades or replacements, enhanced heating and ventilating control systems, and insulation.

Ms. Brockway testifies about the relationship between gas costs and peak demand. Peak demand results from many customers using energy at the same time. For a winter peaking utility such as SEMCO, large energy users such as heating systems are likely to be used at peak times (such as cold winter days). Hence it is extremely likely that measures that save enough energy to be cost-effective enough to qualify as PAYS® products will reduce uses that are coincident with the system peak.

Q. **PLEASE EXPLAIN HOW THE PAYS® SYSTEM WORKS TO PROVIDE CUSTOMERS THE OPPORTUNITY TO REDUCE GAS USAGE AND ASSOCIATED DEMAND.**

A. Once the PAYS® infrastructure is established, customers will choose to buy PAYS® products (PAYS®-qualified energy saving measures) from Certified Contractors. Buyers of PAYS® products will not have to pay anything up-front. Instead, customers will pay for these measures over time on their utility bill. Measures are selected and payments set so that energy bill savings exceed payments for the measure from the first payment. PAYS® charges are attached to the meter location and are paid by the successive customers at that location. The incentive for customers to purchase PAYS® products is to immediately lower their net monthly energy costs while paying noting up front. The benefit to the utility is reduced gas usage and demand.

The key players in the PAYS® system include:

1. Customers at a location who realize the savings from PAYS® products and pay for them only as long as they benefit.
2. The PAYS® Certification Agent who certifies contractors and verifies that proposed measures are sufficiently cost effective to qualify as PAYS® products and provide immediate net savings.

3. Certified Contractors who agree to abide by PAYS® requirements, including installing measures properly, offering extended warrantees, providing bonding (or its equivalent), and agreeing to other consumer assurances.
4. The Utility (SEMCO, should it choose to offer PAYS® to its customers) which bills and collects PAYS® charges.
5. The PAYS® Capital Provider provides the Certification Agent with the funds required to pay for the up-front costs for PAYS® products.
6. Because the PAYS® tariff requires regulatory approval, the MPSC must approve the PAYS® tariff and authorize the utility to treat it the same as any other tariff (for example as regards customer non-payment and bad debt).

Certified Contractors market and sell PAYS® products. The independent Certification Agent, authorized by the Michigan Energy Office[5], assures customers that measures are appropriate and that estimated savings exceed the PAYS® charges so the measures qualify, and pays the vendor once the installation is complete. Capital for measures is supplied by independent Capital Providers or the Certified Contractors. The utility bills and collects the tariffed charges and repays the supplied capital.

In order to assure customers that they will receive immediate net savings, cost-effective energy saving measures can qualify as PAYS® products if all charges to the customer are equal to or less than three-quarters of the energy bill savings over three-quarters of the useful life of the installed measures. The tariffed charge is included on distribution utility bills for customers at that location until all costs have been recovered. The original purchaser pays the tariff for as long as (s)he remains a customer at that location. When occupancy ends, the charge is passed on to the next occupant.

[5] Mr. R. Thomas Martin has indicated by email that the Michigan Energy Office will be willing to assume oversight responsibility for the Certification Agent, should SEMCO choose to implement the recommended PAYS® pilots.

WEWQ. **PLEASE EXPLAIN HOW ACTIVITIES CONDUCTED WITHIN THE PAYS® SYSTEM PROPOSED IN THIS CASE COMPARE TO THOSE CONDUCTED WITHIN A TRADITIONAL UTILITY ENERGY EFFICIENCY PROGRAM.**

A. Traditional utility energy efficiency programs require that the Utility be responsible for delivery of energy efficiency services to customers (e.g., marketing, measure installation, consumer assurance, customer education, etc.); that the Utility fund all or a portion of each energy efficiency measure installed (e.g., rebate, low or no interest loan, etc.); that the Utility budget an amount of money for the aforementioned activities, and set program goals (e.g., number of customer visits, number of measures to be installed, units of energy to be saved, etc.) to be achieved; and that program costs be recovered by the utility from ratepayers generally.

The PAYS® system is very different. As proposed by PAYS America in this proceeding, Vendors with oversight by an independent Certification Agent are responsible for delivery of energy efficiency services to customers (e.g., marketing, measure installation, consumer assurance, customer education, etc.); a third-party capital provider funds of all of the costs for purchase and installation of energy efficiency measures, including any service fees. The utility's one responsibility is to offer the PAYS® tariff; billing and collection of the charges under this tariff is done as it is for all other tariffs. Once the PAYS® system is in place, all energy efficiency activity costs are paid only by participating customers.

Q. **ARE YOU PROPOSING THAT THE COMMISSION ORDER SEMCO TO OFFER THE PAYS® TARIFF TO ITS CUSTOMERS?**

A. No. I am proposing only that the Commission authorize SEMCO to offer the proposed PAYS® tariffs to its customers. Without this authorization, SEMCO cannot offer the PAYS® tariff and achieve the demand and cost reductions that would result even should it

choose to do so.

Q. **DOES YOUR PROPOSAL FOR A PAYS® TARIFF IN THIS CASE INVOLVE ANY COSTS TO BE CARRIED BY THE GCR RATE OR A SURCHARGE TO BE PAID BE ALL CUSTOMERS?**

A. No. The PAYS® tariffs as proposed in this case do not require SEMCO to charge non-participants for any costs associated with putting the PAYS® infrastructure in place. Once the system is in place, participating customers pay all costs associated with installing PAYS® products. There are many ways to implement PAYS®. As noted in EEI's comments in Case No. U-13808, EEI generally recommends allocating start-up costs to all customers; however, it is not always necessary, and my proposal in this case enables PAYS® to be implemented with little or no cost to SEMCO.

Q. **PLEASE DESCRIBE WHAT COSTS WILL BE INCURRED TO OFFER PAYS® TO SEMCO'S CUSTOMERS.**

A. There are four types of costs associated with offering a PAYS® tariff:

1. Design costs: drafting the tariff, forms and contracts; defining the measures to be targeted and measure standards, customers eligible to purchase PAYS® products, requirements for contractor certification, and the roles and responsibilities of the Certification Agent.;
2. Start-up costs: establishing the Certification Agent with an office, equipment, telephone and facilities; and modification to the utility billing system;
3. Operational costs: the costs to provide consumer assurance for PAYS® products purchased and installed by customers; and
4. Bad debt.

Q. **HOW DOES YOUR DESIGN FOR IMPLEMENTING A PAYS® TARIFF ADDRESS DESIGN COSTS?**

A. The Michigan Utility Consumers Participation Board has funded PAYS America to develop this testimony that includes the proposed tariffs. If the Commission authorizes these tariffs and SEMCO chooses to implement them, SEMCO may use these tariffs. EEI will also authorize SEMCO to use its copyrighted contracts and forms at no cost. PAYS America will allow SEMCO to use the PAYS® trademark at no cost.

Q. **HOW DOES YOUR DESIGN FOR IMPLEMENTING A PAYS® TARIFF ADDRESS START-UP COSTS?**

A. The certification agents proposed for the two recommended PAYS® tariffs are The Economic Opportunity Committee of St. Clair County, Inc. and the Delta P2/E2 Center.[6] They will arrange to receive their start-up costs from the capital provider[7], thereby avoiding any need for SEMCO to pay these costs. A small surcharge will be added to each PAYS® product to reimburse these costs.

Because the two pilot tariffs are proposed for limited types of customers in limited areas, SEMCO can implement PAYS America's recommendation in this docket for PAYS® tariff pilots without making permanent changes to its billing and information systems. While I realize that all utilities are different, I think it instructive that conversations with Ms. Lisa A. Brendel of Wyandotte Municipal Services (one of the two municipal utilities considering implementing PAYS®) indicate that Wyandotte would not have to amend its

[6] The Delta P2-E2 Center was formed by the Delta Institute, Inc., a 501(c)3 non-profit organization, to provide technical assistance and financing for pollution prevention and energy efficiency measures (*see* www.p2e2center.org).

[7] The Delta P2-E2 Center has a letter of commitment from a bank with Michigan branches to supply $20,000,000 - $50,000,000 to pay for the upfront cost of PAYS® products as part of a Michigan pilot.

billing and information services for the same two tariffs and that there would not be any cost associated with the one time activity of putting charges on the bill. Nevertheless, If SEMCO reasonably determines that unlike Wyandotte Municipal Services, it would need to recover some costs for adding the PAYS® charges to its monthly bills, the fee structure for each of the two pilots could allow SEMCO to recover reasonable costs for handling PAYS® billing functions from PAYS® customers.

Q. **HOW DOES PAYS AMERICA'S DESIGN FOR IMPLEMENTING A PAYS® TARIFF ADDRESS OPERATIONAL COSTS?**

A. Operational costs will be paid for by PAYS® participants -- PAYS® customers and participating certified contractors. The fee structure for each of the two pilots will cover all costs for the Certification Agent. SEMCO will not have any responsibility for these costs should the fee not be sufficient.

Q. **HOW DOES PAYS AMERICA'S DESIGN FOR IMPLEMENTING A PAYS® TARIFF ADDRESS BAD DEBT?**

A. Implementing the PAYS® pilots as PAYS America proposes will have the effect of reducing SEMCO's overall bad debt, hence lowering all customers' costs associated with uncollectibles:

1. By lowering demand, PAYS® implementation will lower gas costs, as explained by Commissioner Brockway in her testimony. Lower gas costs will lower gas cost recovery factors, make bills more affordable, and hence fewer customers will have trouble paying their bills which will reduce SEMCO's bad debt from present levels.

2. Another reason bad debt will decrease is that customers who are paying their bills now and who purchase PAYS® products and incur PAYS® charges will be less likely to have problems paying their bills. PAYS® charges are offset by greater savings hence PAYS® customers will have lower bills, reducing the number of customers who might have trouble

paying their bills.

3. Another way PAYS® decreases system bad debt is that the bad debt of participating customers is likely to be lower than it otherwise would have been since their bills will be lower, even if PAYS® savings are not enough to prevent non-payment.

4. One of the proposed tariffs targets a customer group that presents little if any exposure to bad debt. MUSH customers (municipal buildings, schools, hospitals and college facilities) pay their bills and don't tend to relocate like other customers.

5. If a product fails, repair is covered by manufacturer and vendor warranties, backed by bonding or an irrevocable letter of credit. If warranty provisions are insufficient to cover repair costs required to maintain the payment obligation, the Certification Agent will effect repairs and collect all repair costs from those getting the savings by extending the term of the payments.

PAYS® tariff obligations have a payment rate significantly better than the average rate for their customer class. New Hampshire Public Service Company's pilot served MUSH customers and had PAYS® related bad debt of zero percent. New Hampshire Electric Cooperative's PAYS® pilot served all customers including residential and small commercial customers. Its PAYS® related bad debt was less than eight hundredths of one percent – a lower rate than the bad debt for any utility company in the country.

Q. **WHAT ARE THE TWO PAYS® TARIFFS THAT YOU ARE PROPOSING THAT THE COMMISSION AUTHORIZE?**

A. The first PAYS® tariff is targeted to residential customers in the City of Port Huron, Port Huron Township, Fort Gratiot, Marysville, and St. Clair, who could cost effectively replace their gas fired heating appliances with more efficient units. The second PAYS® tariff targets buildings constructed or maintained with public funds in the City of Port Huron,

Port Huron Township, Fort Gratiot, Marysville, and St. Clair, and allows the building operators to purchase any gas efficiency measure that is sufficiently cost effective to qualify as a PAYS® product.

Q. **HOW WILL THESE TWO PAYS® TARIFFS REDUCE GAS USAGE AND ASSOCIATED DEMAND FOR SEMCO?**

A. In addition to giving individual customers new opportunities to respond to higher gas prices, and reducing the operating costs of widely used institutions, the two proposed tariffs benefit all customers by, as explained by Ms. Brockway, reducing SEMCO's forecasted demand and leased storage costs. The residential tariff allows targeted residential customers to reduce their heating costs, regardless of whether they own or rent their homes, and thus reduce SEMCO's forecasted demand. The MUSH tariff will also indirectly benefit all customers because lowering MUSH customers' utility costs reduces tax pressure (or health care costs) for all SEMCO customers in the targeted area.

Q. **DOES THIS CONCLUDE YOUR TESTIMONY?**

A. Yes, it does.

TESTIMONY OF HARLAN LACHMAN
EXHIBIT HL-1

PAY AS YOU SAVE® TARIFF

RATE PAYS®

TARIFF

for

GAS DELIVERY SERVICE

Applicable

in

Various towns and cities in Michigan,

served in whole or in part.

(For detailed description of covered service territory, see Attachment 1 of 8 Attachments)

PAY AS YOU SAVE® -- RATE PAYS®

AVAILABILITY

Subject to the Terms and Conditions of the Tariff of which it is a part, this rate is for the installation of PAYS® products: cost effective resource efficiency and load management measures purchased by the Company's customers using the PAYS® system in accordance with this tariff. This rate is for a basic utility service and the customer is liable for payment of the charges under this rate under the same conditions as any other charges for basic utility service including, but not limited to, the Customer's service being subject to disconnection for nonpayment in accordance with the rules of the Commission.

PAYS® products will be installed at the expense of a Certification Agent after the Customer, building owner, and certified Contractor sign contracts using approved forms (Attachments 2, 3 and 4 – RESERVED). The Certification Agent will notify the Company of the amount and term of PAYS® charges agreed to by the Customer and, upon notification, the Company will add these charges to the Customer's regular monthly bills in the amount and for a term established by the Certification Agent. The Company will reimburse the Certification Agent monthly based on billings under this rate. A business or other entity appointed by the Michigan Energy Office (Energy Office) will act as the PAYS® Certification Agent.

This rate is available only to the customers noted in Attachment 1 and only for the measures described. Responsibility for determining eligibility for service under this rate will be made by the Certification Agent providing:

(1) the Customer is a customer of the Company;
(2) funds are available to finance the cost of the PAYS® products to be installed;
(3) the Certification Agent determines the proposed PAYS® products are suitable for installation at the Customer's location and that the resource efficiency measures will be used and useful throughout their estimated life; and
(4) the Certification Agent verifies that the proposed PAYS® products are estimated to produce energy, demand or other savings over three-quarters of their useful life that is equal to or greater than one and one-third times all costs associated with installing the measures, including measure and installation costs, interest charges, and program fees. Although the Certification Agent and the Company expect that all PAYS® Customers will receive lower monthly utility bills, there is no guarantee of savings.

The availability of this rate will be closed to customers after December 31, 2008 unless its continuation is authorized by the Commission.

COMPANY RESPONSIBILITIES

The Company, under contract with the Certification Agent on the approved form (Attachment 7 – RESERVED), will bill and collect PAYS® charges when requested by the Certification Agent under this tariff following its customary and Commission-approved collection procedures, including disconnection when necessary. The Company

will make monthly payments to the Certification Agent or its designee in the amount equal to total PAYS® payments it is obligated to collect for that month, regardless of whether it has received such payments from PAYS® Customers. The Company will recover any documented PAYS®-related uncollectibles from all its Customers after having exhausted all reasonable and customary collection efforts and accounted for any collections from extended payment terms to cover costs associated with missed payments in accordance with customary Commission-approved procedures.

The Company will answer PAYS® Customers' questions about PAYS® products and PAYS® payment obligations, including questions about the measures installed, estimated savings, payment amount, estimated term of payments, disclosure obligations and Customers' rights and responsibilities as per the contract documents (Attachments 2 – 4 – RESERVED). The Company will also instruct non-PAYS® Customers how they may purchase PAYS® products in accordance with this tariff, by referring them to the Certification Agent, providing them with a list of certified Contractors supplied by the Certification Agent, and providing instructions about the use of the PAYS® Purchase Agreement.

The Company will be responsible for notifying new Customers at locations at which PAYS® products have been installed of the benefits associated with the PAYS® products, the Customer's responsibility for the payment of the remaining PAYS® charges, and other rights and obligations and will send them the Automated Utility-Generated New Customer Form (Attachment 8 – RESERVED) within fifteen (15) business days of their application for service. This form explains the new Customer's rights and responsibilities.

The Company will not be liable for any decisions or actions taken by the Certification Agent, including but not limited to identification of the Company's customers (unless Company staff confirmed a customer at a location to Certification Agent), selection of measures, savings estimates, decisions on repairs or extending payment terms to collect missed payments and repair costs, or injury or damage to homes related to installation or use of PAYS® products.

CERTIFICATION AGENT RESPONSIBILITIES

The Certification Agent will certify and maintain a list of Contractors who are willing to sign the Contractor Installation Agreement (Attachment 3 – RESERVED) and make it available to the Company and its customers.

The Certification Agent will act as the Customer's agent in verifying that PAYS® products proposed by certified Contractors are suitable for the Customer's end uses and are estimated to produce sufficient savings in energy usage, demand or other savings to qualify as PAYS® products. The Certification Agent will arrange for a certified Contractor:

(1) to install the measures;
(2) to instruct the Customer on the proper use, operation and maintenance of the measures; and
(3) to certify that the measures are properly installed and operating as designed.

The Certification Agent will arrange for a Disclosure Lien (Attachment 5 – RESERVED) to be recorded at the County Register of Deeds for each location at which a PAYS® product is installed to facilitate disclosure of PAYS® obligations to successor customers at this location.

Upon notification by the Customer that work is complete, the Certification Agent will verify that the measure(s) have been installed and may inspect the location to verify that the measure(s) have been properly installed and are operating as designed. The Certification Agent will arrange for payment to the Contractor and instruct the Company to begin collecting PAYS® charges for the estimated payment term. However, any verification by the Certification Agent and request that the Company initiate PAYS® charges in no way limits the installing Contractor's and product manufacturer's liability as per contractual agreement with Certification Agent and under Michigan law.

After receiving notice from the Customer of a failed PAYS® product, the Certification Agent will evaluate any report, and at its option, the Certification Agent will cause the PAYS® product(s) to be repaired or replaced and will notify the Company to extend the term of remaining PAYS® payments as required to recover all repair or replacement costs including Certification Agent's administrative costs. If within fifteen days of notification by the customer, the Certification Agent has not arranged for the repair or replacement of a failed PAYS® product, the Certification Agent will instruct the Company to terminate charges under this rate.

Certification Agent will also request PAYS® payment terms to be extended in the event Company notifies it that one or more Customers have missed payments and that these costs have been charged to Company's bad debt. The Company will retain such payments, when and if they are eventually made and use them to reduce any PAYS® related bad debt.

CUSTOMER RESPONSIBILITIES

Prior to the installation of any PAYS® products, the Customer will sign a Purchase Agreement (Attachment 2 – RESERVED) which will provide that the Customer is a customer of the Company and agrees to be responsible for all responsibilities enumerated in the Purchase Agreement, including:

(1) payment of the PAYS® charge in addition to all other charges on the monthly bill;
(2) informing the Certification Agent if their PAYS® products fail or malfunction so that the estimated reductions in demand, energy use, or other savings may not be realized;
(3) maintaining the PAYS® products at the service location, taking reasonable steps to prevent damage to such measures and being responsible for all costs associated with Customer damage or neglect, including the Certification Agent's administrative costs, repair costs and all remaining payments even if the measure is not repaired or replaced;
(4) becoming fully informed concerning the routine operation and maintenance of the PAYS® products installed at the service location;
(5) allowing access by the Certification Agent or its agent, at reasonable times, for any inspection or repair of PAYS® products; and

(6) accepting responsibility for the cost of out- of-warrantee repairs not caused by the Customer. Customers may accept such responsibility through any of the following:

(a) the Customer may arrange and pay for the PAYS® product's repair,
(b) the Customer's casualty insurance may arrange and or pay for repairs,
(c) the Customer may allow the Certification Agent to make repairs and agree to an extension of the number of monthly payments to cover the Certification Agent's cost of repair.

For portable PAYS® products (designated on Attachment 1 or on the Customer Purchase Agreement, Attachment 2 – RESERVED), the Customer must pay for the remaining balance under the PAYS® Purchase Agreement with the Certification Agent when the Customer terminates service with the Company at the location where the Customer is paying charges under this rate.

For permanently installed PAYS® products, a Customer's obligation to pay for the PAYS® products ends when the Customer closes the account at that location. However, a Customer may opt to change the status of a permanent measure to a portable measure by obtaining prior approval from the Certification Agent and paying for the remaining balance under the Purchase agreement with the Certification Agent when the Customer terminates service with the Company at the location.

If the Customer is the owner or lessor of the premises, the Customer must provide written notification to inform any/all prospective purchasers or renters of the location that there is an unexpired obligation under a PAYS® Purchase Agreement. Failure to provide disclosure will constitute permission by the owner or lessor for successor Customer to break any lease or purchase agreement without consequence. Providing a copy of the PAYS® Disclosure Form signed by the successor Customer (Attachment 6– RESERVED) will constitute proof of disclosure of this obligation. Whenever a Customer applies for service at a location which was the subject of a previous PAYS® Purchase Agreement, payment for which has not been completed, such Customer shall undertake the Customer responsibilities described herein, shall become responsible for the remaining balance, and receive notification of PAYS benefits and obligations associated with the PAYS® product(s). Acceptance of electric service constitutes acceptance of these benefits and obligations by the new Customer.

The Disclosure Lien recorded at the Registrar of Deeds will help ensure that lessees and purchasers of premises with PAYS® obligations learn about PAYS® obligations before signing lease or purchase agreements.

LANDLORD'S AND LESSOR'S RESPONSIBILITIES

In order to be eligible to accept the installation of PAYS® products in a location which is rented or leased to tenants who currently are customers of the Company or future tenants of such locations who will apply for service from the Company at such locations, the owner and the landlord or lessor (in case the landlord or lessor is not the owner) must enter into a Landlord Agreement (Attachment 4– RESERVED) under which they agree all enumerated responsibilities, including:

(1) to provide access for the Contractor to enter the Landlord's premises and install PAYS® products and conduct related work as necessary, and for the Certification Agent to inspect or repair the installed products;

(2) to cooperate in obtaining the consent of any existing tenants to enter into a PAYS® agreement with the Certification Agent;
(2) to inform all prospective new tenants of the obligation to make regular PAYS® payments up to the amount of the remaining balance of any previous PAYS® agreement attributable to the rented or leased location; failure to provide disclosure will constitute permission by the owner landlord or lessor to break any lease or purchase agreement without consequence (providing a copy of the PAYS® Disclosure Form (Attachment 6 – RESERVED) signed by the new tenant will constitute proof of disclosure of this obligation); and
(3) to inform all subsequent owners or lessors of these obligations with respect to informing tenants of their rights and obligations under this tariff which will be enumerated in the Automated Utility Generated New Customer Form (Attachment 8– RESERVED) sent by the Company to all tenants within fifteen (15) business days of their applying for service.

PRICING AND CONTRACT TERM

The Purchase Agreement will specify the monthly PAYS® Charge and the initial term of the payment period. The initial term of the Purchase Agreement may be extended by the Certification Agent to recover its costs for out-of-warrantee repairs or missed payments.

ATTACHMENT 1
[for Residential PAYS® Products only]

SEMCO Energy Gas Company residential customers residing in the City of Port Huron, Port Huron Township, Fort Gratiot, Marysville, and St. Clair may purchase a high efficiency heating system (i.e., boilers or furnaces and accompanying materials necessary for their successful installation) as a PAYS® product if installed by a PAYS® Certified Contractor and certified by the PAYS® Certification Agent and providing it meets the following criteria and certifications:

- Energy Star appliance or equivalent (for non-US manufactured units)
- AFUE rating of 92% or higher (95% preferred)
- Steady state efficiency of 92% or higher when unit has been operating and is heated up
- All federal, state, and local codes and permitting requirements including successful mechanical inspection
- Installation is in accordance with all federal, state and local codes and manufacturers' specifications
- 10 year parts and labor warranties

ATTACHMENT 1
[for Non-Residential PAYS® Products only]

SEMCO Energy Gas Company MUSH customers (as defined by the federal government, e.g., LBL National Lab as municipal governments, universities, schools, and hospitals) may purchase any resource efficiency measure as a PAYS® product if installed by a PAYS® Certified Contractor and certified by the PAYS® Certification Agent and providing it meets the following criteria and certifications:

- Energy Star approved (if relevant)
- AFUE rating of 88% or higher (if heating system)
- Steady state efficiency of 90% or higher (if heating system)
- All federal, state, and local codes and permitting requirements
- Installation is in accordance with all federal, state and local codes and manufacturers' specifications
- If the municipality requires inspection of installations, such inspection is successful

ATTACHMENTS 2-8

[RESERVED - Not included]