
Customers with Incomes to 50% of the Federal Poverty Level in PECO Energy's Customer Assistance Program

An Independent Evaluation of a Customer Assistance Program

Prepared for:

PECO Energy Company & LIURP Advisory Committee

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**Customers with Incomes to 50% of the
Federal Poverty Level in PECO
Energy's Customer Assistance Program**

Foreword

This study should help PECO Energy better serve low-income households with affordable rates. The study is limited to residential customers (households) with incomes at and below 50% of the Federal Poverty Level. The focus is affordability.

Affordability is a provision of the Electric Generation Customer Choice and Competition Act, 66 Pa. C.S. §§ 2801-2812 and also of the universal service provisions of PECO's electric restructuring filing and subsequent settlement agreement. The PECO restructuring settlement agreement delegated the issue of whether CAP Rate is appropriate for all low-income customers to the Joint Petitioners to the settlement agreement.

The analysis makes affordability open and transparent. It compares the affordability of the current CAP Rate Design to an alternative Percentage of Income Payment Plan (PIPP).

Problems indicated in this study are not caused by the Universal Services group staff or management, who demonstrate a consistent good faith effort. Rather, they have to do with higher level concerns of regulatory compliance, corporate allocation of necessary staffing resource to the Universal Service functions, corporate allocation of necessary ongoing computer support (IT), corporate problems of control over parts of programs outsourced to call centers, and an archaic customer information system.

In short, the root problem is at a higher level: regulatory compliance, commitment to low-income customers, management systems, and program design. All of the problems are fixable.

At the same time the problems indicated should not detract from the fact that PECO Energy has implemented the largest CAP in Pennsylvania and taken a substantial financial stake in serving the needs of low-income households.

Finally, under the restructuring agreements the company is subject to a rate cap until 2007. It may be that steps toward the recommendations in this study must be taken in two parts. First, reallocation from existing program to provide for additional staffing, computer support and necessary programming changes to insure program control for conformance and effectiveness. Second, funding the full recommendations of the study – which will require additional funds – once the rate cap has expired.

H. Gil Peach, Ph.D.
June 2002

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Findings & Recommendations

I. EXECUTIVE SUMMARY

The focus in this study is affordability. The study is limited to PECO Energy's customer households with incomes below 50% of the Federal Poverty Level. This Executive Summary presents the essential answers to the key questions on affordability. These answers are expanded upon in the study text and appendices.

A. The Extent of the Affordability Problem

In the Pennsylvania Public Utility Commission Order of September 28, 2000,¹ the Commission incorporated the term of the Merger Settlement that provides for PECO and the LIURP Advisory Committee to determine if a "safety net" or "special needs" component is necessary. Specifically, the order states that "...based on the CAP Rate evaluation, PECO's CAP quarterly reports to BCS, and our review of BCS payment arrangement requests, we find that the CAP Rate may not comply with section 2802(10) of the Act for approximately 20% of CAP Rate customers who have low incomes and high usage. The CAP Rate *simply may not be affordable* for this group of customers as required by section 2802(10) of the Act" (italics added). Results of the study show that CAP Rate generates a substantial affordability problem.

PECO's present CAP is *not affordable for most customers* with incomes from 1-50% of the Federal Poverty Level. It is affordable for customers toward the top of this income range who have minimal energy use. Only about 15% of current CAP 0-50% FPL participants currently have affordable electric bills under CAP Rate (See VI-6).

B. Methods of Analysis

Four approaches are taken to the affordability problem. First, analysis of customer interviews. Second, comparative analysis of the usage-related distribution of bills under the current CAP Rate and PECO's previous program designs. Third, the development of "Sector Maps" to

¹ Docket No. M-00001418, PECO's Submission of Universal Service and Energy Conservation Plan in Compliance with Section 54.74, Order of September 28, 2000.

examine “please pay” amounts in relation to income (energy burden) at a highly detailed level.² The use of “Sector Maps” is a new approach that goes beyond previous studies in permitting an open and transparent understanding of affordability by locating customers along dimensions of energy use and household income. The fourth approach is analysis of customer bills and payments in the current program. Results of each of the first three approaches are mutually supportive. Each approach yields the same result: the current CAP-Rate approach leads to substantial affordability problems. These problems are inherent in the structure of CAP Rate.

C. CAP Rate & Affordability

There are two drawbacks associated with the CAP Rate approach that make it a sub-optimal approach from the perspective of affordability and the perspective of collections. These two drawbacks associated with (1) affordability and (2) undercollection (free ridership). If a two or three tiered “CAP Rate” approach were to be adjusted to make it affordable for customers living at 50% of the Federal Poverty Level, it would remain unaffordable for customers at 20% of the Federal Poverty Level. If a two or three tiered CAP-Rate approach is adjusted to work for households at 20% of the Federal Poverty Level, it will under bill customers at 50% of the Federal Poverty Level. This is a generic problem associated with the treatment of customers in large income blocks.

The problem can be addressed by creating a number of income blocks, while retaining a CAP Rate approach. However, the income block approach is inherently sub-optimal. The optimal solution occurs in the limit, as income blocks become smaller. In the limit, the optimal solution is a Percentage of Income Payment Program (PIPP) approach. For a PIPP the household is the unit, and payment is tailored to the income of each household. The PIPP approach also maximizes collections, consistent with affordability (See mathematical proof, VI-12, Footnote 26).

The past two evaluations of PECO’s Customer Assistance Programs recommended modification to provide for certain “special needs” customers a smaller program with a wider range of assistance or a “back-up safety net.”³ As demonstrated in the study, a PIPP is the optimal solution to providing affordability while preventing free-ridership problems. Based on the analysis presented in this study, the Evaluation Team provides the following recommendation to PECO Energy:

² Each grid square in the sector maps for electric service represents 73 households. This is a finer level of detail than has been developed in past evaluations of Customer Assistance Programs.

³ RPM Systems, Inc., *Evaluation of PECO’s Customer Assistance Program, Final Report*, September 1994, Pp. 13-14. Peach, H. Gil, *Process Evaluation of the PECO Energy “CAP-Rate” Pilot*. Beaverton, Oregon: H. Gil Peach & Associates/Scan America®, January 12, 1998, Monograph 981-2, P. xxi. Peach H. Gil, *Impact Assessment of the PECO Energy “CAP-Rate” Pilot*. Beaverton, Oregon: H. Gil Peach & Associates/Scan America®, Monograph 988-1, August 31, 1998, P. 15.

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- (1) Replace the “CAP Rate” approach by a Percentage of Income Payment Plan (PIPP) for households with income in the range of 1% to 50% of the Federal Poverty Level.

D. Customers below 20% of the Federal Poverty Level

In the income range from 1% of poverty to approximately 20% of the Federal Poverty Level, households suffer extreme poverty. Somewhere around the 20% level, the effectiveness of pricing systems begins to break down since customer income is not sufficient. These households are best addressed through a CARES program. PECO Energy’s previous PIPP Pilot, PIPP Program, and Percentage of Bill/Percentage of Income Program (POB/PIPP) met the needs of these households through minimum bill and maximum income requirements, and through a staffed CARES program. A fully staffed CARES program is the optimal approach for addressing these customer households.

PECO does attempt CARES referrals currently, but there is no CARES staff. The outsourced call centers are not a viable CARES resource. Without a dedicated staff, the CARES program is unlikely to begin to be able to meet the service need. CARES at PECO Energy is a virtual program. PECO needs to back this program with a material commitment.

- (2) Establish a materially tangible CARES program, and restore the previous CARES staffing levels.

E. Communication & Outreach

Customers often do not know that they are on CAP. No one interviewed in the survey fully understood the discount. No one understands arrearage forgiveness. About half of the customers do not understand about “authorized” and “unauthorized” pay stations. On the positive side, nearly all persons were aware that PECO has assistance programs. Also, nearly all knew they could call to work out payment arrangements.

PECO needs to continue to develop effective communications pieces on all of the components of Universal Services as well as related PECO services, such as Authorized Payment Stations. Each piece should contain a clear (plain language) explanation of what the service is, what it delivers, who is eligible, how you sign up and other conditions for receiving benefits through the program.

- (3) Continue to develop the three-year Outreach Plan to recruit customers in to CAP and other Universal Service programs. Continue to tailor communications regarding Universal Services programs (For example, we were unable to find information for low-income or payment troubled customers on the PECO website). In particular, develop and send out educational materials to encourage participation in CAP, and involve community-based agencies.

F. Data Mart/Data Warehouse vs. Data Quality & Systems

The Data Mart/Data Warehouse approach is sound. However, it has been built over top of a mix of Customer Information Systems (CIS) that are noticeably behind current information technology. Also, the key demographic (and poverty) data used to assign households to rate riders is often not entered into the computer system or not retained by the system once entered. This may in part be a problem of instructions and necessary work discipline in the contracted out call centers, and in part be a problem of a failure in programming and allocation of computer resources to retain this data. The short list of demographic data, including the poverty level is an essential precondition to maintaining a program that can be evaluated and/or audited. It is essential that PECO Energy plan for and provide continued staff support from IT to maintain and improve the Data Mart, and to make it easy for Universal Staff to use. It is also essential that the problem associated with the entry of demographics and poverty data be resolved.

- (4) Dedicate IT staff to maintain and continuously improve the Data Mart/Data Warehouse to serve Universal Services management needs.
- (5) Review and improve instructions to and work discipline at (outsourced) call centers to insure that demographic and poverty data is entered. Assign IT and computer resources to fix the data retention for demographic and poverty data. For example, the data entry screen could be set to freeze until the demographic data necessary to generate the poverty level is entered. The Customer Information System (CIS) should be programmed to save and store the demographic data related to poverty including income, expense, and number in household. Also, to make the data useful, an internal CIS field that generates a date stamp for the date the poverty related data is entered and the poverty level is computed should be added to the system. The CIS should be programmed to internally generate and save the percent poverty level based on data input by the call center representative. Manual override of this field should be restricted to special circumstances and to those with express permissions.
- (6) For purposes of evaluation and program auditing, program CIS to store the final computed monthly "Please Pay" amount (the amount the customer is asked to pay each month). Also store the current due, current past due, and pre-program arrearage. Store a monthly CAP indicator for the rate rider code and participation status.
- (7) Universal Service and IT should jointly look at the screen for household income and consider changes to this screen to more fully capture component income amounts and sources.

G. Administrative Overhead

Reverification can be moved to a two-year cycle. This step will cut administrative overhead. If necessary, the practicality of this step can be documented through a field test.

- (8) PECO should request that the Pennsylvania Public Utility Commission permit re-verification of account status on a 2-year basis, rather than the current 1-year basis. This two-year recertification should begin after the full re-verification of all current accounts.

Universal Service

The Customer Assistance Programs (CAP)

II. THE STUDY AND THE PROGRAM

This study examines the affordability of PECO Energy's Customer Assistance Program for customers under 50% of the Federal Poverty Level.⁴ The purpose of the study is to develop useful, policy-relevant information for PECO Energy, the parties to the Settlement Agreement, and the Pennsylvania Public Utility Commission.

PECO Energy operates three low-income programs. These are a fuel fund (the Matching Energy Assistance Fund or "MEAF"), a Low-Income Usage Reduction Program (LIURP), and a Customer Assistance Program (CAP). In addition, there are other projects and areas of focus such as Solar-Renewables,⁵ and both Education and CARES functions.⁶ This study is focused on only the Customer Assistance Program and CARES.⁷ CARES is included since it is a necessary solution for customers under 20% of the Federal Poverty Level.

In addition to examination of the current program, the study provides a contrast with previous PECO approaches to Customer Action Programs. It incorporates material from the past two

⁴ A full evaluation of the Universal Services programs will be finished in the fall of 2002.

⁵ Reichmuth, Howard & H. Gil Peach, *PECO Energy Renewables Pilot Program Engineering Evaluation*. Hood River, Oregon: H. Gil Peach & Associates & Stellar Processes, December 2000.

⁶ Education and CARES are focus areas for PECO Universal Service, rather than programs.

⁷ The LIURP evaluations are conducted by Robert L. Fantauzzo and InSyst, Inc. Current LIURP evaluations include: Fantauzzo, Robert L., *An Analysis of PECO Energy Company's Low-Income Usage Reduction Program, 1996 Program Year*. Boalsburg, Pennsylvania: InSyst, Inc., April 1998; Fantauzzo, Robert L., *Analysis of PECO Energy Company's Low-Income Usage Reduction Program, 1997 Program Year*. Boalsburg, Pennsylvania: InSyst, Inc., April 1999; Fantauzzo, Robert L., *Analysis of PECO Energy Company's Low-Income Usage Reduction Program, 1998 Program Year*. Boalsburg, Pennsylvania: InSyst, Inc., May 2000.

evaluations of PECO Energy’s Customer Assistance Program.⁸ The report also draws on relevant Pennsylvania Public Utility Commission documents and is referenced to the affordability definitions of the Pennsylvania Code.

A. Authorities

This study has multiple authorizations:

- Pennsylvania Code §69.265(10)
- Gas Restructuring Settlement Docket No. R-00994787
- Joint Petition for Settlement (Merger Settlement) at Docket No. A-110550F0147 relating to the PECO merger with Unicom Corporation, Section D. Universal Service

In addition, the study is closely coordinated with and referenced to:

- Electricity Generation Customer Choice and Competition Act, 66 Pa. C.S. §§2801-2812, in particular, §2802(10): “...the Commonwealth must, at a minimum, continue the protections, policies and services that now assist customers who are low-income to afford electric service.”
- 52 Pennsylvania Code §§69.265(2)
- Letter of Janice Hummell to Dave Epple, May 24, 20001. This letter summarizes results of meetings of the Bureau of Consumer Services (BCS) with utilities regarding evaluations, needs assessments, and Customer Assistance Program (CAP) costs and savings. Hummell, Janice, Letter (with four attachments) to David O. Epple, Vice President, Regulatory Affairs, Energy Association of Pennsylvania, May 24, 2001.
- Pennsylvania Public Utility Commission order of September 28, 2000, in reference to PECO’s Submission of Universal Service and Energy Conservation Plan in Compliance with Section 54.74, Docket No. M 00001418.

⁸ The 1991 and 1994 evaluations were conducted by David Cross (Cross, David, *The Philadelphia Electric Company Customer Assistance Program: An Evaluation*. New Have, Connecticut: RPM Systems, Inc., July 1991; Cross, David, *Evaluation of PECO’s Customer Assistance Program, Final Report*. New Haven, Connecticut: RPM Systems, Inc., September 1994). The CAP Rate Pilot was evaluated by H. Gil Peach in two reports: Peach, H. Gil, *Impact Assessment of the PECO Energy “CAP Rate” Pilot*. Beaverton, Oregon: H. Gil Peach & Associates, 1998, Monograph 988-1; H. Gil Peach, *Process Evaluation of the PECO Energy “CAP Rate” Pilot*. Beaverton, Oregon: H. Gil Peach & Associates/Scan America®, 1998, Monograph 981-2.

The basis for the analysis is that “A customer assistance program must be affordable to help a customer maintain electric service.”⁹

B. Customer Assistance Programs at PECO

Customer Assistance Programs are alternatives to traditional collection methods for low income, payment troubled customers. Customers participating in CAPs agree to make monthly payments adjusted (often, but not always) for family size and family income. The goal is to encourage payment for an amount that is less than payment at the standard tariff, but payment that is regular, on-time, and in-full.

PECO has used three different program designs for its Customer Assistance Program (Figures II-1 and II-2). The pilot (1984-1988) was a Percentage of Income Payment Plan (PIPP), as was the Customer Assistance Program from 1988-1992. The designs for the pilot PIPP and the PIPP program differed only in the amount of the minimum monthly bill. In both cases, the income used in the calculation to determine the monthly energy bill was adjusted downwards from gross income by 30%.¹⁰ From 1992 to 1998, the Customer Assistance Program was considerably elaborated to develop a mixed approach that combined a Percentage of Bill (POB) design with additional rules that limited bills according to income and to energy use (a POB/PIPP program).¹¹ In this program, we could not find documentation for either a continued use of the 30% reduction or for adjustment of income by expenses.

After beginning a CAP Rate approach on a pilot basis in 1996, a full CAP Rate Customer Assistance Program approach was adopted in 1998. In the CAP Rate approach, income is supposed to be ascertained then periodically re-verified as in the PIPP and POB/PIPP approaches, but customers are assigned to one of two large blocks. In PECO’s tariff these groups are defined as from 0% to 100% and from 101% to 150% of the Federal Poverty Level.¹² The CAP Rate design for the bottom block is shown in Figure II-1.

⁹ Pennsylvania Public Utility Commission order of September 28, 2000, in reference to PECO’s Submission of Universal Service and Energy Conservation Plan in Compliance with Section 54.74, Docket No. M-00001418, P. 2, at Lines 5-7.

¹⁰ The reduction of 30% is defined as an adjustment to after-tax income, but this particular explanation may be a convenience. At the time, other utilities were developing net income from gross income and necessary expenses. The 30% deduction may have simply been a way to avoid those complications.

¹¹ The energy use provisions would only apply after Low Income Usage Reduction Program services were applied, so it is likely that it had very limited application.

¹² In fact, the first group ranges from 0-110% of the Federal Poverty Level and the second from 111-150% of the Federal Poverty Level. This was explained to the Evaluation Team as an artifact of a computer program that the Company did not intend to spend the dollars to fix.

The program designs can be compared by developing the customer bills for households under 50% of the Federal Poverty Level (Section VI). However, before turning to the comparative bill analysis, interview results from surveys of customers designated by PECO as 50% and below are presented in the form of brief “word pictures” in Section III, and then in cross-tabulated format in Section IV.

PECO CUSTOMER ASSISTANCE PROGRAMS		
(1) The PIPP Pilot	(2) PIPP Program	(3) The POB/PIPP Program
1984-1988	1988 - March 92	April 92 - 1998
<p>Percentage of <i>after-tax</i> income, keyed to rates: 3% for R (Electric GS) 8% for RH (Electric heat) 8% for H, R (Gas heat with electric service) 5% for G, R (Gas & electric with oil heat).</p> <p>Minimum bill: \$2.00</p> <p>[Note: After tax income is defined as gross income minus 30% of gross income.]</p>	<p>Percentage of <i>after-tax</i> income, keyed to rates (same as PIPP Pilot)</p> <p>Minimum bill: \$5.00</p> <p>[Note: After tax income defined as in the PIPP pilot.]</p>	<p>Percentage of bill keyed to poverty level (Up to 50%, pay 40% of bill; 51-100% poverty, pay 60% of bill; 101-150% poverty, pay 80% of bill.</p> <p>Subject to percentage of income limit: 4% for WH 4% for G (Gas GS) 7% for H (Gas heat) 8% for R (Electric GS) 15% for RH (Electric heat) 15% for R&G (Gas heat with electric service)</p> <p>Subject to energy limit after LIURP and one year of case management: 800 kWh for R 1500 kWh for RH 1600 kWh for WH 50 ccf for G 100 ccf for H 800 kWh, 100 ccf for R&G</p> <p>Minimum bill: \$12.00 for R (Electric GS) \$12.00 for WH (Off peak) \$12.00 for G (Gas) \$18.00 for H (Gas heat) \$30.00 for RH (Electric heat) \$30.00 for R&G (Gas heat with electric service)</p>

Figure II-1: PECO's Programs

Approach 4 - The CAP RATE Program
(Portion for Electric Service from 0-100% of Federal Poverty Level)

Fixed Charge: \$5.10 per month.

Variable Charge (cost per kWh):

Variable Cost	Summer (June - September)		Winter (October - May)	
	1st 500 kWh	Over 500 kWh	1st 500	Over 500
RATE R RESIDENCE SERVICE				
Variable Distribution Service Charge	4.19	4.87	4.19	4.19
Competitive Transition Charge	2.75	3.18	2.75	2.75
Energy & Capacity Charge: Default Provider of Last Resort	5.27	5.88	5.27	5.27
Total Variable Cost	12.21	13.93	12.21	12.21
CAP1 APPLIED TO RATE R RESIDENCE SERVICE				
Variable Distribution Service Charge	2.03	4.19	2.03	4.19
Competitive Transition Charge	1.33	2.75	1.33	2.75
Energy & Capacity Charge: Default Provider of Last Resort	2.54	5.27	2.54	5.27
Total Variable Cost	5.90	12.21	5.90	12.21
CAP Payment Percentage of Variable Cost	48.3%	87.7%	48.3%	100.0%

Variable Cost	Summer (June - September)		Winter (October - May)		
	1st 500 kWh	Over 500 kWh	1st 500	500+ to 600 kWh	Over 600 kWh
RATE R-H RESIDENTIAL HEATING SERVICE					
Variable Distribution Service Charge	4.02	4.67	4.02	4.02	1.67
Competitive Transition Charge	2.75	3.18	2.75	2.75	1.22
Energy & Capacity Charge: Default Provider of Last Resort	5.49	6.13	5.49	5.49	3.16
Total Variable Cost	12.26	13.98	12.26	12.26	6.05
CAP 1 APPLIED TO RATE R-H RESIDENTIAL HEATING SERVICE					
Variable Distribution Service Charge	1.94	4.02	1.94	1.94	1.94
Competitive Transition Charge	1.33	2.75	1.33	1.33	1.33
Energy & Capacity Charge: Default Provider of Last Resort	2.65	5.49	2.65	2.65	2.65
Total Variable Cost	5.92	12.26	5.92	5.92	5.92
CAP Payment Percentage of Variable Cost	48.3%	87.7%	48.3%	48.3%	97.9%

Figure II-2: The CAP Rate for 0-100% of Poverty.

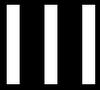
C. Structure of the Report

Affordability is analyzed using four separate analytic methods:

- Customer Interviews
- Comparative Bill Analysis
- Sector Maps
- Analysis of Bills and Payments

The results of the interview approach are presented first (Sections III and IV), then results of the comparative bills analysis (Section V and Section XIII to Section XIX). The Sector Map analysis of the distribution of affordability (Section VI), and analysis of bills and payments (Section VII) follow. A discussion of CARES (Section VIII), a short profile (Section IX), and a discussion of economic context follow. A summary is presented in Section XI, and the bibliography in Section XII.

In order to check conformance of PECO's CAP with affordability, we need a definition of affordability. This study uses a conservative, upper end, interpretation of the definition provided in the Pennsylvania Code. By using the upper end of the definitional ranges, the affordability problem is somewhat understated (See Figure VI-4, P. VI-5).



Listening to the Customers

Life and Bills from the Customer Perspective

III. BRIEF WORD PICTURES: TWELVE FAMILIES

One method of approach to the problem of affordability is to gather data through customer interviews. PECO drew a random sample of customers for the 0-50% of Poverty range. The evaluation team further randomized that sample and contacted customers in a randomized list order to conduct 45-60 minute interviews. These are twelve of the stories told by the survey respondents who are in the 1% -50% Federal Poverty Level range. These stories are broadly representative and chosen to represent the spectrum of the families in the 1-50% FPL in PECO's service territory. These stories are not the exception but are typical in this sector. The stories offer a glimpse into the difficult situations faced daily by this segment of the population.

The families include both single person households (for example, senior citizens living alone) and homes with many children. Many of these households have illness and disability. Some householders have full-time jobs, others are unemployed and looking for work, others are unable to work. Each story is unique. Many people need additional assistance, and help in finding the information that tells them how to find that assistance. These are the families that could benefit from a more tangible CARES program (Section VIII).

A. Single Mom, Eight Children

Household A includes the single head of household and eight children. This customer says she has trouble managing her energy use. She lives in a house that is heated by electricity upstairs and gas downstairs, and when she had both services, it was difficult to keep the house at a constant temperature. Her gas service was disconnected because she couldn't pay the bill, and now she relies just on electricity. She has problems making payments even though she lives in subsidized housing. She is struggling to get by and make ends meet. She was not aware of the need to re-verify for the CAP Rate Program annually.

B. Single Mom, Three Children, Asthma

Household B pays PECO for both gas and electricity. This customer said is on CAP Rate for electricity but not for gas, and does not know what the CAP discount is. The household consists of a single mom with 3 children, one with asthma. The mother reports that her

children are out of control, and her major expenses consist of repairs for damage done by the children. She has not worked outside the home in seven years because she is heavily involved in a legal case but did not provide details.

C. Single Mom, Disabled Children

Household C includes a mom who stays at home and cares for her two disabled children. She struggles to pay the bills and is confused about the procedures and policies regarding the CAP Rate Program. Her bills are still fairly high, as much as \$380 per month, and she has to scrape together money, including loans from family members, to pay her bills. She stated that once she managed to pay a little extra on her bill and PECO increased her minimum monthly payment to that amount the following month. She feels that she gets “the run around” when she calls PECO with questions about her bill, and says that the customer service representatives have a “bad attitude.” She has had several power outages in her home, once forcing her to relocate with her disabled children for several days. She feels she should have received financial compensation since this was PECO’s outage. She is a very frustrated customer.

D. Single Mom, Three Children, Heart Problem

Household D includes a 32-year-old single mom who has 3 children ages 3, 4 and 12 months. One child is on a heart monitor. This customer works full time and earns less than \$10K per year. She also receives TANF, food stamps and rents a Section 8 apartment. She has lived in her community since 1996. She telephoned PECO about their weatherization program and was told she could not apply until she has been in her residence one year.

E. Single Mom, Three Children, Asthma

The household (E) includes a 46-year old disabled single mother with 3 children. One of the children has chronic asthma. The customer tries to prevent the asthma attacks by leaving the A/C on during the summer and an air cleaner on continuously. This customer has a GED and recently lost her job. She is currently on the CAP Rate, and reports she had some difficulty enrolling in the program. She had to send in the documentation twice, and also wasn’t clear about the program’s policies. She struggles to pay the bills, especially her electric bill. The bill became very high this summer, about \$1,500, due to the very hot summer months and the need to operate the air conditioner for her son. She wishes that PECO could provide some more customized information and even though she participated in an energy audit, she doesn’t believe that this audit was particularly useful. Even though she falls behind in her bills, she says she always tries to pay the amounts due, even if it takes a long time. She said she managed to pay off one outstanding bill for over \$1,500, even though it took her “quite a few years.” She did not know about CAP Rate arrearage forgiveness, or how medical certificates worked. She said she was unaware of any other low-income programs available to assist her with her energy bills. Despite her struggles, she views herself as more fortunate than others.

She was very proud that she did not have to rely on food pantries or other community resources. She said that she has more than others, and is grateful.

F. Living Alone, High Bills, Vision Problems

Household F consists of a single adult who is disabled and has had sight problems since eye surgery last July. This customer reports her main problem is that she is on Budget Billing and can't get out from under a high arrearage. She pays an extra \$15 per month. Her PECO arrearage payment and electricity bills were about \$300 for two months. She lives in an apartment in a 4-unit building, and believes there is something wrong with the service since her bills are so high. She has been in the building 9 years, and her electric bills used to be around \$50-60 per month. She had two visits from PECO to find out what is wrong but she isn't satisfied. Other tenants will not allow PECO into their units because they distrust PECO. She reports that PECO representatives are generally courteous. However, she reports that once when her service was terminated she called to find out when it would be reconnected, the PECO representative was rude, and it took PECO 3 days to reconnect her. The householder of Household F is a 44-year old diabetic who had surgery this summer and got behind on her bills because she lost 3 months' income. She has been terminated twice in the last 12 month period, and has had to pay reconnect fees of \$650 one time and \$316 the other time. Since paying the \$650 reconnect bill last August, she is facing a new bill of \$300 plus \$15 for an arrearage payment and does not understand why. To pay her bills she has foregone her rent and gas payments, and borrowed money from friends and relatives. She lives alone, is a former hairdresser, takes a bus to work and makes \$500 per month. It is inadequate income to pay her bills. Her doctor feels she should be on disability but she feels if she works she will make more money than disability could provide. She considers herself conscientious about her bills, and has called the PUC two times to complain about PECO's lack of leniency with people who "don't try to duck or dodge" their responsibilities. She has never heard of CAP Rate or any special rate or arrearage forgiveness programs, has never been told by a PECO representative about such opportunities, but has taken advantage of Budget Billing.

G. Living Alone, Unemployed, Injured

Household G is a one-person household. This customer lives alone and has been unemployed since last year, although she has been looking for work and works on and off when work is available. She recently fell and broke her leg, which caused unexpected medical expenses. She is 51 years old and a high school graduate, living in the same apartment for 31 years.

H. Single Mom, Grandmother, Children, Medical Problems

Household H consists of a 36 year old head of household with 4 teenagers aged 18, 17, 16 and 14 years old in addition to children aged 12, 9, 3, 1 and 9 months old. The 9-month old grandson has a heart disease and one of her sons has acute asthma. During the week of the interview, this customer traveled back and forth to the hospital caring for two children, one

with asthma and one with food poisoning she suspects was contracted from a fast food restaurant. She graduated from high school and has been unemployed since September 2001.

I. Single Mom, One Child, Asthma, Defacto Heating

The single mom in this household (I) has one child with asthma and just recently changed jobs. When she was between jobs she had trouble paying both gas and electricity bills. She is dissatisfied with the job situation in Philadelphia, and thinks it is difficult to find good-paying jobs. She ran out of money and the gas was shut off, so she became a de-facto heating customer. She learned about the CAP Rate program from the gas company, and her bills have been lower since enrolling in the program last summer. Even though her bills are lower, she thinks they should be even lower because no one is at home during the day.

J. Living Alone, waiting on SSI, Depressed

The householder of Household J says she has been diagnosed as clinically depressed and suicidal, and she is unable to work full time. She states she is learning to become more self-sufficient and is learning about the responsibilities of running a household, paying bills, etc. She is taking the responsibility seriously and reports that she is making her payments every month on time. She found out about the CAP program from a friend and enrolled when she set up her PECO account. She is waiting to receive Social Security Disability payments, but until then lives on approximately \$1,000/month.

K. Single Mom, Four Children, Asthma, Sickness, One Room

Household K consists of a 31 year old single mother with 4 children ages 11, 10, 9 and 4. She has not received gas from PECO in 6 years. Two daughters are sick; one with asthma and the other with epilepsy and the customer also has a disability. The customer, who completed the 11th grade, is currently in a job-training program earning \$5.15/hr. She is also receiving TANF, food stamps and Medicaid. She is looking for full time work. She is not receiving child support that could add, if paid, \$515 per month. The family is not at home except in the evenings and they live in one room to conserve electricity. The mother is using an electric hot plate and a microwave oven for cooking. She has no plans to restore gas service because there is an outstanding bill of \$2,000. She states that it is not her bill and it is a case of mistaken identity. When she called PECO about receiving an erroneous bill for \$2,000, her gas was shut off the same day without a shut off notice. PECO told her that they have a photo of her signing up for service, and the customer denies that it is she. PECO told her she has no options, that no one can assist her, and that she is responsible for the bill.

L. Summary

The twelve households in this section provide a selective but real picture of families up to 50% of the Federal Poverty Level. The poverty factors that run throughout these examples are

single parent families, deterioration of income in old age, and sickness. These poverty factors and others interact to produce payment problems. For example, sickness in the family occurs in a context in which workers lack sick time and vacation pay, and at a level at which workers often are not provided with flexible working hours. Thus, time spent by an adult with a sick child represents a permanent loss of income and easily upsets anticipated payments.

Households/Customers

IV. CUSTOMERS INTERVIEW ANALYSIS

This section expands upon the “word pictures” of Section III to provide a more fully developed picture based on interview surveys. Thirty (30) households were interviewed.¹³ Surveys could be completed in person at one of five centers¹⁴ or by telephone. Most surveys were completed by telephone. The full set of interview questions on which this section is based is included in Section XXI of this report.

A coherent picture of the households can be developed by looking at how they fare in relation to some of the key dimensions of urban life in Philadelphia and the surrounding counties.

A. Demographics

Nearly all persons surveyed are female and head of household (Figures IV-1 & IV-2). Almost three-quarters identify as Afro-American (Figure IV-3). Household size ranges from one to ten persons (Figure IV-4). Most of the households have from one to five persons. About one-quarter of households have at least one child under the age of five. Just under one-fifth of households have at least one senior citizen.

¹³ The customer lists were provided by PECO and were randomized by computer. Customers were contacted in list order from the randomized list. Thirty customers were included from a list of customers from 0-50% of the Federal Poverty Level (FPL).

¹⁴ The five centers were Carroll Park Community Council, Bucks County Opportunity Council, Chester County, Montgomery County Community Action Agency, and York County.

Head of Household

		Count	Percent
Are you the head of household?	Yes	27	90.0
	No	3	10.0
	Total	30	100.0

Figure IV-1: Head of Household

Female/Male

		Count	Percent
Respondent's sex	Female	28	93.3
	Male	2	6.7
	Total	30	100.0

Figure IV-2: Sex

Ethnic/Racial/Cultural Identification

		Count	Percent
What ethnicity, culture, or race do you most closely identify with?	White-Caucasian	5	16.7
	Black-African American	21	70.0
	Other, Mixed	4	13.3
	Total	30	100.0

Figure IV-3: How Respondents Identify

Size of Household

	No.	Count	Percent
How many people are in your household?	1	6	20.0
	2	6	20.0
	3	3	10.0
	4	9	30.0
	5	3	10.0
	7	1	3.3
	9	1	3.3
	10	1	3.3
	Total	30	100.0

Figure IV-4: Size of Household

Education

What is the highest educational level you completed?	Level	Count	Percent
	Some high school, not graduated	8	26.7
	Specialized technical, business school-not HS graduate	1	3.3
	GED, HS Graduate, or HS Equivalency	8	26.7
	Specialized training after HS	1	3.3
	Some college	7	23.3
	College Graduate-AA, BS, BA	4	13.3
	Post-Graduate	1	3.3
	Total	30	100.0

Figure IV-5: Education

Own/Rent

Do you own or rent your current home?		Count	Percent
	Own	6	20.0
Rent	23	76.7	
Other	1	3.3	
Total	30	100.0	

Figure IV-6: Own or Rent

As shown in Figure IV-5, the respondents as a group show solid educational backgrounds. While approximately one-quarter did not complete high school, three-quarters did complete high school (or GED). About 20% have some college. College graduates make up one-sixth of the group.

Most households are renting. About 20% own their own home (Figure IV-6).

B. Health

About one-half of those interviewed reported their personal general health in positive terms, (good, very good, or excellent) and the other half reported health as fair or poor (Figure IV-7).

General Health

In general, how is your health?		Count	Percent
	Excellent	4	13.3
Very Good	6	20.0	
Good	6	20.0	
Fair	7	23.3	
Poor	7	23.3	
Total	30	100.0	

Figure IV-7: General Health

Fifty percent (15 out of 30) report that health conditions cause them to restrict activities a little, some, or a lot. Of those reporting health restrictions, about 60% say their activities are restricted a lot (Figure IV-8). When asked if anyone living in the home has a health problem, nearly 60% of households reporting say that at least one member of the household has a health problem (Figure IV- 9).

Health Restrictions

		Count	Percent
How much do your health problems keep you from doing regular activities?	A lot	9	30.0
	Some	4	13.3
	A little	2	6.7
	Total	15	50.0
	Missing	15	50.0
	Total	30	100.0

Figure IV-8: Health Restrictions

Health Problems in the Home

		Count	Percent
Does anyone living with you in your home have a health problem?	Yes	17	56.7
	No	12	40.0
	Total	29	96.7
	Missing	1	3.3
	Total	30	100.0

Figure IV-9: Health Problem in the Home

Regional Health Tendency

		Count	Percent
Do you think people in your neighborhood have more sickness, less, same as 5 yrs ago?	More	9	30.0
	Same	5	16.7
	Less	2	6.7
	Don't know	14	46.7
	Total	30	100.0

Figure IV-10: Health Tendency

As in the prior study, the households report receiving adequate health care. As shown in Figure 12, about 90% of households report adequate care. This corresponds exactly to homes with health coverage for the family (Figure IV-11).

Adequacy of Health Care

Do you think you and the people in your home are getting adequate health care?		Count	Percent
	Yes	27	90.0
	No	2	6.7
	Other	1	3.3
	Total	30	100.0

Figure IV-11: Adequacy of Health Care

Health Coverage

Do you have health coverage for you and your family?		Count	Percent
	Yes, for me and my family	27	90.0
	Just for myself	2	6.7
	No	1	3.3
	Total	30	100.0

Figure IV-12: Health Coverage

C. Universal Service

Nearly all persons surveyed were aware that PECO has assistance programs (28 out of 30), but less than 15% (4 out of 30) recognized the term “Universal Service.” Thirteen out of thirty recognized “CAP Rate” as an assistance program without aid from the interviewer. Of the remaining seventeen, sixteen recognized “CAP Rate” with aid from the interviewer. One out of thirty recognized “LIURP” without aid. Of the other twenty-nine, twelve recognized “LIURP” with aid. Only three out of thirty recognized “CARES” without aid, and one out of the remaining twenty-seven recognized “CARES” with aid. Twelve out of thirty recognized the LIHEAP Cash Grant without aid. Of the remaining eighteen, fourteen recognized LIHEAP Cash with aid. Four out of thirty recognized LIHEAP Crisis. Of the remaining twenty-six, only three recognized LIHEAP Crisis with aid. Three out of thirty recognized MEAF without aid. Of the remaining twenty-seven, only one recognized MEAF with aid.

About 90% know that they can call PECO to make payment arrangements. In the past year, 63% have made calls to work out payment arrangements and the same percentage has made payment arrangements over the past year. At one time or another, 18% have been told they could not make payment arrangements, and 30% say have been offered payment arrangements they could not afford.

About 50% reported receiving assistance with a PECO bill, 50% reported receiving a LIHEAP Cash grant, 27% had received a LIHEAP Crisis grant, and 7% reported receiving help from MEAF. Forty-seven percent (47%) reported that on at least one occasion they had wanted help with a PECO bill, but could not get help.

Approximately 60% (18 out of 30) have *heard* that some pay stations are “authorized” and others are “unauthorized” pay stations. However, there is indication that many do not know the difference. According to comments, people seemed to know that it takes longer for a payment to get to PECO from an “unauthorized” pay station, but they did not understand that the extra fee they had to pay in order to make a payment to PECO through an “unauthorized” pay station is linked to the fact that the station is “unauthorized.”¹⁵ About 67% regularly pay their bill at a pay station, while about 20% regularly mail in their payments to PECO. The remaining 13% sometimes do a mail payment and sometimes go to a pay station. Of those who go to pay stations, 53% are aware of paying an extra fee.

Authorized/Unauthorized

	Count	Percent
Ever heard authorized vs. unauthorized?	Yes	18
	No	12
	Total	30

Figure IV-13: Heard about "Unauthorized"?

About 60% of those surveyed learned about CAP Rate directly from a PECO representative, while 3% learned about CAP Rate from nonprofit agencies, and 33% heard about CAP Rate through other sources. Regarding CAP Rate, about 87% of those surveyed said that it was clear what information was requested in order to qualify for the program, and only 7% said it was difficult to provide the income information.

¹⁵ Two important facts here are that “unauthorized” pay stations charge a fee for each customer transaction and are not linked to PECO’s computerized system. Thus a payment made “on time” from the perspective of the life-world of a neighborhood customer may incur penalties for “late payment” because the corporate computer system will not become aware of the payment until some days later and will treat the payment as a late payment. Because the payment system is set up with this defect, a person who runs in to an “unauthorized” pay station to pay something to stop a termination (for example) is out of luck, because the payment is not credited at time of payment. Some customers reported this as one of the reasons they were shut off.

A total of 83% of those surveyed obtain their electricity from PECO, while about 17% use other suppliers. Nearly everyone (87%) understands they are on CAP Rate, but only about 17% of those surveyed say they understand the discount, and only 10% (3 out of 30) knew the discount is 50%.¹⁶ *No one* knew it is 50% of *the first 500 kWh*.

Understanding the Discount

		Count	Percent
Do you know how much your payment is discounted?	Yes	5	16.7
	No	22	73.3
	Total	27	90.0
	Missing	3	10.0
	Total	30	100.0

Figure IV-14: Understand the Discount

Understanding the Discount Percentage

		Count	Percent
Payment is discounted by this percent.	3	1	3.3
	10	1	3.3
	15	1	3.3
	50	3	10.0
	Total	6	20.0
	Missing	24	80.0
	Total	30	100.0

Figure IV-15: Understand Discount Percent

About 57% of those surveyed recognize the words “reverify” or “recertify.” About 27% recall being told about recertification when they signed up for CAP Rate.

PECO made referrals of 7% of those surveyed to LIURP, 37% to LIHEAP Cash, 23% to LIHEAP Crisis, and 3% each to Chester County CARES, Emergency Repair Hotline, and Food Stamps. Thirteen percent were referred to other services.

¹⁶ CAP Rate, Supplement No. 36 to Tariff Electric Pa. PUC No. 3, Twelfth Revised Page No. 41, Issued Dec. 21, 2001, effective January 1, 2002. See Paragraph 2, where a 51.9% discount on the first 500 kWh per month is specified for customers for 0-100% of the FPL.

D. Using Energy

About 43% of the households report trouble in controlling energy use (Figure IV-16). About 33% have been terminated by PECO at one time or another. About 33% have used a medical certificate to stop termination. About 23% have contacted a public agency about PECO service.

Energy Troubles

	Count	Percent
Do you have trouble controlling energy use?	Yes	13 43.3
	No	17 56.7
	Total	30 100.0

Figure IV-16: Trouble with Energy Use

More than one-half (60%) have received energy education materials from PECO and 37% of the households have been audited. Many households report that they take actions to decrease energy use. About 27% do their own “no-cost/low-cost” weatherization, 30% turn down thermostats in winter, 27% turn air conditioners down or off in summer, 13% have repaired broken windows or doors, and 3% have made major repairs. A total of 63% report turning off lights in unused rooms, and 30% have tried one or more energy efficient light bulbs.

E. Arrearage Forgiveness

About 40% (12 out of 30) were aware that past due balance could be forgiven. About 53% (16 out of 28) said they did not know if past due amounts could be forgiven. Of those who were aware of an arrearage forgiveness provision, *no one* knew what had to happen for a past due balance to be forgiven. Effectively, no one understands the arrearage forgiveness provision of PECO’s CAP. [Customers who qualify and are placed on the CAP Rate will have their pre-program arrearage forgiven if they remain current on their CAP bill for six to twelve months. Pre-program arrearage is forgiven except for \$500.00. The \$500.00 will not be sent to Collections so long as the customer remains in the CAP. The development of any new arrearage during this period will delay forgiveness. Customers that develop any new arrearage will be offered a payment agreement. CAP customers do not have to pay late charges – late charges are shown on the bill, but are not applied.]

F. Supplier Choice

About 77% remember receiving information on choosing a different energy supplier, and almost 17% decided to switch suppliers. Of those who switched 14% said it made no

difference in their bills, 43% said their bills were higher, and 43% said their bills were lower. About 17% said they were switched without being asked. Of those switched without being asked, nearly all (80%) switched back to PECO.

G. Representatives

About 87% said they were satisfied with service received from PECO representatives, while about 13% said they were dissatisfied. A total of 17% said a PECO representative treated them disrespectfully on at least one occasion, while 83% report always being treated respectfully.

H. Payment Problems

About 57% said they did not have enough money to pay their bills and 50% fell behind in utility bills.

I. Life Events

Nearly all families had multiple major problems and life events in the past year. Sixty-seven percent (67%) could not make a purchase needed by the family. Just over 43% were involved in seeking work, and 47% were in contact with the unemployment or welfare office. A child left home in 3% of households, 7% had childcare problems, 13% had a death in the household, 7% a birth, and 7% a marriage in the immediate family. About 7% were unable to get medical care, 7% were crime victims, 17% experienced a major change in living conditions, 27% had to manage an unexpected major repair, 20% were in contact with a lawyer or the legal system, 13% were unable to pay for transportation to work or school, and 17% had trouble paying on a credit card.

J. Finances, Jobs, Changing Times

Forty percent rated their own financial situation as poor. The remaining 60% rated their financial situation as fair or good, and no one selected the “very good” option (Figure IV-17). In the past year, one-fifth of households (20%) reported an income change of at least one household member and in about 83% of these cases the direction of income change was down. About 83% feel it is harder to get out of poverty today than it was five years ago (13% say it is easier today than it was five years ago). About 20% say Philadelphia is better off economically than five years ago, while 10% say it is about the same, and 63% say it is worse than it was five years ago.

Current Financial Situation (n=30)		
How would you rate your own financial situation today?	Excellent	0
	Good	13.3%
	Only fair	46.7%
	Poor	40.0%

Figure IV-17: Financial Self-Rating.

Current Household Gross Annual Income (n=30)		
Which of the following best describes your current household gross annual income?	\$0-\$5,000 year	33.3%
	\$5,001-\$10,000 year	36.7%
	\$10,001-\$20,000 year	20.0%
	\$20,001-\$30,000 year	10.0%
	Over \$30,000	0

Figure IV-18: Gross Annual Income.

Current Household Net Monthly Income (n=30)		
Which of the following best describes your current household net monthly income?	\$0-\$500 month	40.0%
	\$500-\$1,000 month	43.3%
	\$1001-\$1,500 month	3.3%
	\$1,501-\$2,000 month	10.0%
	2,001-2,500 month	3.3%
	Over 2,500	0

Figure IV-19: Monthly Net Income.

Fluctuation of Monthly Income (n=30)		
Over the past year, how much or how often has your monthly income varied?	Not at all, never	64.3%
	A little, occasionally, rarely	14.3%
	Somewhat-sometimes	7.1%
	A lot, frequently, every month	14.3%

Figure IV-20: Stability of Income.

Components of Reported Household Income 0-50% Federal Poverty Level (n=30)		
Included child support in household income reported	Yes	10.0%
Included food stamps in household income reported	Yes	46.7%
Included TANF in household income reported	Yes	23.3%
Included General Assistance in household income reported	Yes	23.3%
Included Medicare-Medicaid in household income reported	Yes	10.0%
Included Unemployment Compensation in household income reported	Yes	3.3%
Included loans from family-friends in household income reported	Yes	3.3%
Included gifts of money from family-friends in household income reported	Yes	6.7%
Included Section 8 in household income reported	Yes	10.0%
Included Social Security Disability in household income reported	Yes	13.3%
Included Social Security Supplemental Security Income in household income reported	Yes	10.0%
Included Health Plan benefits in household income reported	Yes	3.3%
Included any other assistance in household income reported	Yes	6.7%

Figure IV-21: What Household includes in Income.

Major Ongoing Bills (n=30)		
A major ongoing bill is food, groceries	Yes	80.0%
A major ongoing bill is gasoline	Yes	13.3%
A major ongoing bill is car payments	Yes	10.0%
A major ongoing bill is credit cards	Yes	10.0%
A major ongoing bill is utilities	Yes	96.7%
A major ongoing bill is car repairs	Yes	10.0%
A major ongoing bill is rent or mortgage	Yes	80.0%
A major ongoing bill is college, technical, or vocational school	Yes	10.0%
A major ongoing bill is childcare	Yes	10.0%
Other ongoing bills	Yes	10.0%

Figure IV-22: What Households See as Major Bills.

General Financial Situation Assessment (n=30)		
Unexpected expenses resulting in bill payment difficulty in last 12 months	Yes	43.3%
	No	56.7%
At end of month finances usually work out	Some money left over at the end of the month	13.3%
	Just enough to make ends meet	26.7%
	Not enough to make ends meet	60.0%
Current financial situation as compared to 5 yrs ago	Better off	23.3%
	Somewhat better off	10.0%
	About the same	20.0%
	Somewhat worse off	10.0%
	Definitely worse off	36.7%

Figure IV-23: General Financial Situation.

Financial Assistance Assessment (n=30)		
Food stamps recipient	Yes	70.0%
TANF recipient	Yes	26.7%
General Assistance recipient	Yes	23.3%
Medicare-Medicaid recipient	Yes	30.0%
Unemployment Compensation recipient	Yes	3.3%
Loans from family and friends	Yes	6.7%
Gifts of money from family and friends	Yes	3.3%
Section 8 recipient	Yes	16.7%
Social Security Disability recipient	Yes	13.3%
Social Security Supplemental Security Income recipient	Yes	10.0%
Health Plan benefits recipient	Yes	10.0%
Reduced or free school lunches recipient	Yes	20.0%

Figure IV-24: Sources of Financial Assistance.

Financial Difficulties (n=30)		
There was not enough money to buy something important needed for family	Yes	33.3%
Did not have enough money to pay the bills	Yes	56.7%
An unexpected repair was necessary for a major household item	Yes	26.7%
Fell behind in rent or mortgage payments	Yes	23.3%
Fell behind in gas, electric, water, or phone bills	Yes	50.0%
Had trouble paying a credit card balance	Yes	16.7%
Provided financial or other help to someone living in different household	Yes	13.3%

Figure IV-25: Types of Financial Difficulties.

Employment & Unemployment			
What is your current employment status? (n=30)	Full time: 30 hrs or more per week	4	13.3%
	Part-time: less than 30 hrs per week	2	6.7%
	More than 1 part-time job, less than 30 hrs per week each	1	3.3%
	Currently in job training program	1	3.3%
	No regular work	1	3.3%
	Do not work outside the home	4	13.3%
	Currently unemployed	11	36.7%
	Disabled	6	20.0%
How many months were you employed in the last 2 years? (n=23)	0	6	26.1%
	3	2	8.7%
	4	1	4.3%
	8	1	4.3%
	10	1	4.3%
	12	6	26.1%
	17	1	4.3%
	24	5	21.7%
If unemployed now, how many months have you been unemployed? (n=13)	2	1	7.7%
	4	1	7.7%
	5	1	7.7%
	8	1	7.7%
	10	1	7.7%
	11	1	7.7%
	12	3	23.1%
	16	1	7.7%
	30	1	7.7%
	36	1	7.7%
48	1	7.7%	

Figure IV-26: Employment.

Job Availability

	Count	Percent
Which do you think is the most correct statement about available jobs?	Many jobs available, but pay is not high enough	16 53.3
	Not many jobs and it is hard to find work	11 36.7
	Many jobs available and pay is high enough	2 6.7
	Don't know	1 3.3
	Total	30 100.0

Figure IV-27: Job Availability

About 10% are satisfied that there are enough good jobs in Philadelphia right now, and about 80% are not satisfied regarding jobs available in Philadelphia. About 90% see problems with the Philadelphia job structure (Figure IV-27). About 77% feel that more should be spent on public assistance.

K. Summary

Generally, households in the 0-50% of Federal Poverty Level are burdened with many problems, problems that interact. They also encounter a high number of major life events. Slightly more than half have restrictions due to health problems. They report problems with the job structure. They have problems paying bills, including utility bills and about 50% have fallen behind in paying utility bills over the past year.

A few problems are evident from the surveys:

(1) Communications & Recruitment into CAP: People often do not know that they are on CAP. No one in the survey fully understood the discount. No one understands arrearage forgiveness, and people generally do not understand about “authorized” and “unauthorized” pay stations. PECO needs to continue to develop effective communications pieces on all of the components of Universal Services as well as regular PECO services, such as Authorized Payment Stations. Each piece should contain a clear (plain language) explanation of what the service is, what it delivers, who is eligible, how you sign up and other conditions for receiving benefits through the program.

(2) Payment Problems: The survey information indicates that affordability is a problem for customers in the 0-50% of poverty range. As noted regarding major life events of the past year, about 57% could not pay their bills and 50% fell behind in utility bills.

Energy Bills

V. COMPARATIVE BILLS: THREE PECO DESIGNS

When energy bills are compared under three of PECO's approaches to the Customer Assistance Program, dissimilarity in bills is strikingly apparent.¹⁷ This is perhaps best shown by means of two illustrations:

(1) A family of one member living at 50% of the Federal Poverty Level and using 500 kWh in a summer month would pay \$7.52 in PECO's PIPP, \$28.63 in PECO's POB/PIPP, \$34.64 in CAP Rate, and \$66.57 under Residential General Service Rate R.

(2) A family of one member living at 20% of the Federal Poverty Level, and using 500 kWh in a summer month would pay \$5.00, \$12.00, \$34.62, or \$66.57.

These are very large differences in bills for low-income customers.

A. Purpose & Findings of Comparative Bill Analysis

The purpose of this section of the study is to provide bill tables contrasting the different Customer Assistance Program approaches at current residential rates. Each case takes the billing rules of an actual PECO program and applies them to the electric service rates for Rate R (residential baseload or general service) or Rate RH (residential electric heat) effective January 27, 2002.¹⁸

¹⁷ The PIPP Pilot (1984-1988) is not compared in these tables, but a detailed breakdown of bills for each of the four pilot and program approaches is provided in Appendix I for each of PECO's approaches to the Customer Assistance Program, the PIPP Pilot, the PIPP Program, the POB/PIPP Program, and the CAP Rate Program. These illustrations are calculated using the rules for the different PECO Customer Assistance Programs, but applied to current standard residential rates. With the rates standardized, the affordability effects of the different approaches may be directly compared.

¹⁸ CAP Rate, Supplement No. 36 to Tariff Electric Pa. PUC No. 3, Twelfth Revised Page No. 41, Issued Dec. 21, 2001, effective January 1, 2002. See Paragraph 2, where a 51.9% discount on the first 500 kWh per month is specified for customers for 0-100% of the FPL.

Comparison tables for family sizes from 1 to 3 persons are included in this Section. Comparison tables for family sizes from 4 to 6 persons can be found in Appendix VI. As shown in these comparison tables:

PIPP bills are generally one fourth to one half of the equivalent POB/PIPP bills.

Both PIPP and POP/PIPP bills are generally only a fraction of the equivalent CAP Rate bills.

The tables also show how the minimum bill and the maximum bill limit bound both the PIPP and the POB/PIPP bills.

These tables demonstrate why the interviews (Sections III and IV) include comments from low-income customers regarding their frustration with the difficulty of paying much higher CAP Rate bills.¹⁹ The CAP Rate bills for these customers are simply very much higher than the “please pay” amounts under PECO’s prior customer assistance programs.

Also, the prior Customer Assistance Programs offered standard bills, while the CAP Rate bills vary with energy use.

In the tables of Figure V-1, the darker shaded area represents the minimum bill limit under the prior Customer Assistance Programs, and the lighter shaded area represents the maximum bill.

Extensive detail for comparative bill analysis is given in Section XIII through Section XIX. These tables provide look-up information for a full range of energy use under the different program approaches.

B. Summary

The customer experience of “please pay” billing amounts differed greatly under at the lower end of the low-income range when PECO moved customers from the previous program to CAP Rate. While CAP Rate may work on average, it does not work well for these customers at the lower end.

¹⁹ Some of these comments are direct; others are expressed as frustration with their perceptions that the Company shows an inability to help them address high bills.

Figure V-1: Summer and Winter Rates by Family Size

Summer, Regular Residential Service (Based on Rate R)											
Family Size =1											
Usage/Mo (KWh)	Rate R	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.41	\$11.02	\$12.00	\$12.00	\$12.00	\$12.00	\$5.00	\$5.00	\$6.01	\$7.52	100
200	\$29.70	\$16.92	\$12.00	\$12.00	\$12.00	\$12.00	\$5.00	\$5.00	\$6.01	\$7.52	200
300	\$41.99	\$22.82	\$12.00	\$16.80	\$16.80	\$16.80	\$5.00	\$5.00	\$6.01	\$7.52	300
400	\$54.28	\$28.72	\$12.00	\$17.18	\$21.71	\$21.71	\$5.00	\$5.00	\$6.01	\$7.52	400
500	\$66.57	\$34.62	\$12.00	\$17.18	\$22.91	\$26.63	\$5.00	\$5.00	\$6.01	\$7.52	500
600	\$85.62	\$51.95	\$12.00	\$17.18	\$22.91	\$28.63	\$5.00	\$5.00	\$6.01	\$7.52	600
700	\$99.55	\$64.16	\$12.00	\$17.18	\$22.91	\$28.63	\$5.00	\$5.00	\$6.01	\$7.52	700
800	\$113.48	\$76.37	\$12.00	\$17.18	\$22.91	\$28.63	\$5.00	\$5.00	\$6.01	\$7.52	800
900	\$127.41	\$88.58	\$12.00	\$17.18	\$22.91	\$28.63	\$5.00	\$5.00	\$6.01	\$7.52	900
1000	\$141.34	\$100.79	\$12.00	\$17.18	\$22.91	\$28.63	\$5.00	\$5.00	\$6.01	\$7.52	1000
1100	\$155.27	\$113.00	\$12.00	\$17.18	\$22.91	\$28.63	\$5.00	\$5.00	\$6.01	\$7.52	1100
1200	\$169.20	\$125.21	\$12.00	\$17.18	\$22.91	\$28.63	\$5.00	\$5.00	\$6.01	\$7.52	1200
1300	\$183.13	\$137.42	\$12.00	\$17.18	\$22.91	\$28.63	\$5.00	\$5.00	\$6.01	\$7.52	1300
1400	\$197.06	\$149.63	\$12.00	\$17.18	\$22.91	\$28.63	\$5.00	\$5.00	\$6.01	\$7.52	1400
1500	\$210.99	\$161.84	\$12.00	\$17.18	\$22.91	\$28.63	\$5.00	\$5.00	\$6.01	\$7.52	1500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

Winter, Regular Residential Service (Based on Rate R)

Family Size =1

Usage/Mo (KWh)	Rate R	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.41	\$11.02	\$12.00	\$12.00	\$12.00	\$12.00	\$5.00	\$5.00	\$6.01	\$7.52	100
200	\$29.70	\$16.92	\$12.00	\$12.00	\$12.00	\$12.00	\$5.00	\$5.00	\$6.01	\$7.52	200
300	\$41.99	\$22.82	\$12.00	\$16.80	\$16.80	\$16.80	\$5.00	\$5.00	\$6.01	\$7.52	300
400	\$54.28	\$28.72	\$12.00	\$17.18	\$21.71	\$21.71	\$5.00	\$5.00	\$6.01	\$7.52	400
500	\$66.57	\$34.62	\$12.00	\$17.18	\$22.91	\$26.63	\$5.00	\$5.00	\$6.01	\$7.52	500
600	\$78.86	\$51.95	\$12.00	\$17.18	\$22.91	\$28.63	\$5.00	\$5.00	\$6.01	\$7.52	600
700	\$91.15	\$64.16	\$12.00	\$17.18	\$22.91	\$28.63	\$5.00	\$5.00	\$6.01	\$7.52	700
800	\$103.44	\$76.37	\$12.00	\$17.18	\$22.91	\$28.63	\$5.00	\$5.00	\$6.01	\$7.52	800
900	\$115.73	\$88.58	\$12.00	\$17.18	\$22.91	\$28.63	\$5.00	\$5.00	\$6.01	\$7.52	900
1000	\$128.02	\$100.79	\$12.00	\$17.18	\$22.91	\$28.63	\$5.00	\$5.00	\$6.01	\$7.52	1000
1100	\$140.31	\$113.00	\$12.00	\$17.18	\$22.91	\$28.63	\$5.00	\$5.00	\$6.01	\$7.52	1100
1200	\$152.60	\$125.21	\$12.00	\$17.18	\$22.91	\$28.63	\$5.00	\$5.00	\$6.01	\$7.52	1200
1300	\$164.89	\$137.42	\$12.00	\$17.18	\$22.91	\$28.63	\$5.00	\$5.00	\$6.01	\$7.52	1300
1400	\$177.18	\$149.63	\$12.00	\$17.18	\$22.91	\$28.63	\$5.00	\$5.00	\$6.01	\$7.52	1400
1500	\$189.47	\$161.84	\$12.00	\$17.18	\$22.91	\$28.63	\$5.00	\$5.00	\$6.01	\$7.52	1500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

Summer, Regular Residential Service (Based on Rate R)

Family Size =2

Usage/Mo (KWh)	Rate R	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.41	\$11.02	\$12.00	\$12.00	\$12.00	\$12.00	\$5.00	\$6.10	\$8.13	\$10.16	100
200	\$29.70	\$16.92	\$12.00	\$12.00	\$12.00	\$12.00	\$5.00	\$6.10	\$8.13	\$10.16	200
300	\$41.99	\$22.82	\$15.48	\$16.80	\$16.80	\$16.80	\$5.00	\$6.10	\$8.13	\$10.16	300
400	\$54.28	\$28.72	\$15.48	\$21.71	\$21.71	\$21.71	\$5.00	\$6.10	\$8.13	\$10.16	400
500	\$66.57	\$34.62	\$15.48	\$23.22	\$26.63	\$26.63	\$5.00	\$6.10	\$8.13	\$10.16	500
600	\$85.62	\$51.95	\$15.48	\$23.22	\$30.96	\$32.20	\$5.00	\$6.10	\$8.13	\$10.16	600
700	\$99.55	\$64.16	\$15.48	\$23.22	\$30.96	\$37.77	\$5.00	\$6.10	\$8.13	\$10.16	700
800	\$113.48	\$76.37	\$15.48	\$23.22	\$30.96	\$38.70	\$5.00	\$6.10	\$8.13	\$10.16	800
900	\$127.41	\$88.58	\$15.48	\$23.22	\$30.96	\$38.70	\$5.00	\$6.10	\$8.13	\$10.16	900
1000	\$141.34	\$100.79	\$15.48	\$23.22	\$30.96	\$38.70	\$5.00	\$6.10	\$8.13	\$10.16	1000
1100	\$155.27	\$113.00	\$15.48	\$23.22	\$30.96	\$38.70	\$5.00	\$6.10	\$8.13	\$10.16	1100
1200	\$169.20	\$125.21	\$15.48	\$23.22	\$30.96	\$38.70	\$5.00	\$6.10	\$8.13	\$10.16	1200
1300	\$183.13	\$137.42	\$15.48	\$23.22	\$30.96	\$38.70	\$5.00	\$6.10	\$8.13	\$10.16	1300
1400	\$197.06	\$149.63	\$15.48	\$23.22	\$30.96	\$38.70	\$5.00	\$6.10	\$8.13	\$10.16	1400
1500	\$210.99	\$161.84	\$15.48	\$23.22	\$30.96	\$38.70	\$5.00	\$6.10	\$8.13	\$10.16	1500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

Winter, Regular Residential Service (Based on Rate R)

Family Size =2

Usage/Mo (KWh)	Rate R	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.41	\$11.02	\$12.00	\$12.00	\$12.00	\$12.00	\$5.00	\$6.10	\$8.13	\$10.16	100
200	\$29.70	\$16.92	\$12.00	\$12.00	\$12.00	\$12.00	\$5.00	\$6.10	\$8.13	\$10.16	200
300	\$41.99	\$22.82	\$15.48	\$16.80	\$16.80	\$16.80	\$5.00	\$6.10	\$8.13	\$10.16	300
400	\$54.28	\$28.72	\$15.48	\$21.71	\$21.71	\$21.71	\$5.00	\$6.10	\$8.13	\$10.16	400
500	\$66.57	\$34.62	\$15.48	\$23.22	\$26.63	\$26.63	\$5.00	\$6.10	\$8.13	\$10.16	500
600	\$78.86	\$51.95	\$15.48	\$23.22	\$30.96	\$31.54	\$5.00	\$6.10	\$8.13	\$10.16	600
700	\$91.15	\$64.16	\$15.48	\$23.22	\$30.96	\$36.46	\$5.00	\$6.10	\$8.13	\$10.16	700
800	\$103.44	\$76.37	\$15.48	\$23.22	\$30.96	\$38.70	\$5.00	\$6.10	\$8.13	\$10.16	800
900	\$115.73	\$88.58	\$15.48	\$23.22	\$30.96	\$38.70	\$5.00	\$6.10	\$8.13	\$10.16	900
1000	\$128.02	\$100.79	\$15.48	\$23.22	\$30.96	\$38.70	\$5.00	\$6.10	\$8.13	\$10.16	1000
1100	\$140.31	\$113.00	\$15.48	\$23.22	\$30.96	\$38.70	\$5.00	\$6.10	\$8.13	\$10.16	1100
1200	\$152.60	\$125.21	\$15.48	\$23.22	\$30.96	\$38.70	\$5.00	\$6.10	\$8.13	\$10.16	1200
1300	\$164.89	\$137.42	\$15.48	\$23.22	\$30.96	\$38.70	\$5.00	\$6.10	\$8.13	\$10.16	1300
1400	\$177.18	\$149.63	\$15.48	\$23.22	\$30.96	\$38.70	\$5.00	\$6.10	\$8.13	\$10.16	1400
1500	\$189.47	\$161.84	\$15.48	\$23.22	\$30.96	\$38.70	\$5.00	\$6.10	\$8.13	\$10.16	1500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

Summer, Regular Residential Service (Based on Rate R)

Family Size =3

Usage/Mo (KWh)	Rate R	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.41	\$11.02	\$12.00	\$12.00	\$12.00	\$12.00	\$5.12	\$7.68	\$10.24	\$12.80	100
200	\$29.70	\$16.92	\$12.00	\$12.00	\$12.00	\$12.00	\$5.12	\$7.68	\$10.24	\$12.80	200
300	\$41.99	\$22.82	\$16.80	\$16.80	\$16.80	\$16.80	\$5.12	\$7.68	\$10.24	\$12.80	300
400	\$54.28	\$28.72	\$19.51	\$21.71	\$21.71	\$21.71	\$5.12	\$7.68	\$10.24	\$12.80	400
500	\$66.57	\$34.62	\$19.51	\$26.63	\$26.63	\$26.63	\$5.12	\$7.68	\$10.24	\$12.80	500
600	\$85.62	\$51.95	\$19.51	\$29.26	\$32.20	\$32.20	\$5.12	\$7.68	\$10.24	\$12.80	600
700	\$99.55	\$64.16	\$19.51	\$29.26	\$37.77	\$37.77	\$5.12	\$7.68	\$10.24	\$12.80	700
800	\$113.48	\$76.37	\$19.51	\$29.26	\$39.01	\$43.34	\$5.12	\$7.68	\$10.24	\$12.80	800
900	\$127.41	\$88.58	\$19.51	\$29.26	\$39.01	\$48.77	\$5.12	\$7.68	\$10.24	\$12.80	900
1000	\$141.34	\$100.79	\$19.51	\$29.26	\$39.01	\$48.77	\$5.12	\$7.68	\$10.24	\$12.80	1000
1100	\$155.27	\$113.00	\$19.51	\$29.26	\$39.01	\$48.77	\$5.12	\$7.68	\$10.24	\$12.80	1100
1200	\$169.20	\$125.21	\$19.51	\$29.26	\$39.01	\$48.77	\$5.12	\$7.68	\$10.24	\$12.80	1200
1300	\$183.13	\$137.42	\$19.51	\$29.26	\$39.01	\$48.77	\$5.12	\$7.68	\$10.24	\$12.80	1300
1400	\$197.06	\$149.63	\$19.51	\$29.26	\$39.01	\$48.77	\$5.12	\$7.68	\$10.24	\$12.80	1400
1500	\$210.99	\$161.84	\$19.51	\$29.26	\$39.01	\$48.77	\$5.12	\$7.68	\$10.24	\$12.80	1500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

Winter, Regular Residential Service (Based on Rate R)

Family Size =3

Usage/Mo (KWh)	Rate R	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.41	\$11.02	\$12.00	\$12.00	\$12.00	\$12.00	\$5.12	\$7.68	\$10.24	\$12.80	100
200	\$29.70	\$16.92	\$12.00	\$12.00	\$12.00	\$12.00	\$5.12	\$7.68	\$10.24	\$12.80	200
300	\$41.99	\$22.82	\$16.80	\$16.80	\$16.80	\$16.80	\$5.12	\$7.68	\$10.24	\$12.80	300
400	\$54.28	\$28.72	\$19.51	\$21.71	\$21.71	\$21.71	\$5.12	\$7.68	\$10.24	\$12.80	400
500	\$66.57	\$34.62	\$19.51	\$26.63	\$26.63	\$26.63	\$5.12	\$7.68	\$10.24	\$12.80	500
600	\$78.86	\$51.95	\$19.51	\$29.26	\$31.54	\$31.54	\$5.12	\$7.68	\$10.24	\$12.80	600
700	\$91.15	\$64.16	\$19.51	\$29.26	\$36.46	\$36.46	\$5.12	\$7.68	\$10.24	\$12.80	700
800	\$103.44	\$76.37	\$19.51	\$29.26	\$39.01	\$41.38	\$5.12	\$7.68	\$10.24	\$12.80	800
900	\$115.73	\$88.58	\$19.51	\$29.26	\$39.01	\$46.29	\$5.12	\$7.68	\$10.24	\$12.80	900
1000	\$128.02	\$100.79	\$19.51	\$29.26	\$39.01	\$48.77	\$5.12	\$7.68	\$10.24	\$12.80	1000
1100	\$140.31	\$113.00	\$19.51	\$29.26	\$39.01	\$48.77	\$5.12	\$7.68	\$10.24	\$12.80	1100
1200	\$152.60	\$125.21	\$19.51	\$29.26	\$39.01	\$48.77	\$5.12	\$7.68	\$10.24	\$12.80	1200
1300	\$164.89	\$137.42	\$19.51	\$29.26	\$39.01	\$48.77	\$5.12	\$7.68	\$10.24	\$12.80	1300
1400	\$177.18	\$149.63	\$19.51	\$29.26	\$39.01	\$48.77	\$5.12	\$7.68	\$10.24	\$12.80	1400
1500	\$189.47	\$161.84	\$19.51	\$29.26	\$39.01	\$48.77	\$5.12	\$7.68	\$10.24	\$12.80	1500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

Summer, Residential Electric Heat Service (Based on Rate R-H)

Family Size =1

Usage/Mo (KWh)	Rate R-H	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.38	\$11.04	\$30.00	\$30.00	\$30.00	\$30.00	\$8.02	\$12.03	\$16.03	\$20.04	100
200	\$29.64	\$16.96	\$30.00	\$30.00	\$30.00	\$30.00	\$8.02	\$12.03	\$16.03	\$20.04	200
300	\$41.90	\$22.88	\$30.00	\$30.00	\$30.00	\$30.00	\$8.02	\$12.03	\$16.03	\$20.04	300
400	\$54.16	\$28.80	\$30.00	\$30.00	\$30.00	\$30.00	\$8.02	\$12.03	\$16.03	\$20.04	400
500	\$66.42	\$34.72	\$30.00	\$30.00	\$30.00	\$30.00	\$8.02	\$12.03	\$16.03	\$20.04	500
600	\$78.68	\$40.64	\$30.00	\$31.47	\$31.47	\$31.47	\$8.02	\$12.03	\$16.03	\$20.04	600
700	\$97.78	\$58.02	\$30.00	\$32.21	\$37.06	\$37.06	\$8.02	\$12.03	\$16.03	\$20.04	700
800	\$111.76	\$70.28	\$30.00	\$32.21	\$42.66	\$42.66	\$8.02	\$12.03	\$16.03	\$20.04	800
900	\$125.74	\$82.54	\$30.00	\$32.21	\$42.95	\$48.25	\$8.02	\$12.03	\$16.03	\$20.04	900
1000	\$139.72	\$94.80	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	1000
1100	\$153.70	\$107.06	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	1100
1200	\$167.68	\$119.32	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	1200
1300	\$181.66	\$131.58	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	1300
1400	\$195.64	\$143.84	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	1400
1500	\$209.62	\$156.10	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	1500
1600	\$223.60	\$168.36	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	1600
1700	\$237.58	\$180.62	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	1700
1800	\$251.56	\$192.88	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	1800
1900	\$265.54	\$205.14	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	1900
2000	\$279.52	\$217.40	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	2000
2100	\$293.50	\$229.66	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	2100
2200	\$307.48	\$241.92	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	2200
2300	\$321.46	\$254.18	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	2300
2400	\$335.44	\$266.44	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	2400
2500	\$349.42	\$278.70	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	2500

Key

Minimum Bill Limit
Maximum Bill Limit

Winter, Residential Electric Heat Service (Based on Rate R-H)

Family Size =1

Usage/Mo (KWh)	Rate R-H	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.38	\$11.04	\$30.00	\$30.00	\$30.00	\$30.00	\$8.02	\$12.03	\$16.03	\$20.04	100
200	\$29.64	\$16.96	\$30.00	\$30.00	\$30.00	\$30.00	\$8.02	\$12.03	\$16.03	\$20.04	200
300	\$41.90	\$22.88	\$30.00	\$30.00	\$30.00	\$30.00	\$8.02	\$12.03	\$16.03	\$20.04	300
400	\$54.16	\$28.80	\$30.00	\$30.00	\$30.00	\$30.00	\$8.02	\$12.03	\$16.03	\$20.04	400
500	\$66.42	\$34.72	\$30.00	\$30.00	\$30.00	\$30.00	\$8.02	\$12.03	\$16.03	\$20.04	500
600	\$78.68	\$40.64	\$30.00	\$31.47	\$31.47	\$31.47	\$8.02	\$12.03	\$16.03	\$20.04	600
700	\$89.85	\$51.68	\$30.00	\$32.21	\$33.89	\$33.89	\$8.02	\$12.03	\$16.03	\$20.04	700
800	\$95.90	\$57.60	\$30.00	\$32.21	\$36.31	\$36.31	\$8.02	\$12.03	\$16.03	\$20.04	800
900	\$101.95	\$63.52	\$30.00	\$32.21	\$38.73	\$38.73	\$8.02	\$12.03	\$16.03	\$20.04	900
1000	\$108.00	\$69.44	\$30.00	\$32.21	\$41.15	\$41.15	\$8.02	\$12.03	\$16.03	\$20.04	1000
1100	\$114.05	\$75.36	\$30.00	\$32.21	\$42.95	\$43.57	\$8.02	\$12.03	\$16.03	\$20.04	1100
1200	\$120.10	\$81.28	\$30.00	\$32.21	\$42.95	\$45.99	\$8.02	\$12.03	\$16.03	\$20.04	1200
1300	\$126.15	\$87.20	\$30.00	\$32.21	\$42.95	\$48.41	\$8.02	\$12.03	\$16.03	\$20.04	1300
1400	\$132.20	\$93.12	\$30.00	\$32.21	\$42.95	\$50.83	\$8.02	\$12.03	\$16.03	\$20.04	1400
1500	\$138.25	\$99.04	\$30.00	\$32.21	\$42.95	\$53.25	\$8.02	\$12.03	\$16.03	\$20.04	1500
1600	\$144.30	\$104.96	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	1600
1700	\$150.35	\$110.88	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	1700
1800	\$156.40	\$116.80	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	1800
1900	\$162.45	\$122.72	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	1900
2000	\$168.50	\$128.64	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	2000
2100	\$174.55	\$134.56	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	2100
2200	\$180.60	\$140.48	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	2200
2300	\$186.65	\$146.40	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	2300
2400	\$192.70	\$152.32	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	2400
2500	\$198.75	\$158.24	\$30.00	\$32.21	\$42.95	\$53.69	\$8.02	\$12.03	\$16.03	\$20.04	2500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

Summer, Residential Electric Heat Service (Based on Rate R-H)

Family Size =2

Usage/Mo (KWh)	Rate R-H	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.38	\$11.04	\$30.00	\$30.00	\$30.00	\$30.00	\$10.84	\$16.25	\$21.67	\$27.09	100
200	\$29.64	\$16.96	\$30.00	\$30.00	\$30.00	\$30.00	\$10.84	\$16.25	\$21.67	\$27.09	200
300	\$41.90	\$22.88	\$30.00	\$30.00	\$30.00	\$30.00	\$10.84	\$16.25	\$21.67	\$27.09	300
400	\$54.16	\$28.80	\$30.00	\$30.00	\$30.00	\$30.00	\$10.84	\$16.25	\$21.67	\$27.09	400
500	\$66.42	\$34.72	\$30.00	\$30.00	\$30.00	\$30.00	\$10.84	\$16.25	\$21.67	\$27.09	500
600	\$78.68	\$40.64	\$30.00	\$31.47	\$31.47	\$31.47	\$10.84	\$16.25	\$21.67	\$27.09	600
700	\$97.78	\$58.02	\$30.00	\$37.06	\$37.06	\$37.06	\$10.84	\$16.25	\$21.67	\$27.09	700
800	\$111.76	\$70.28	\$30.00	\$42.66	\$42.66	\$42.66	\$10.84	\$16.25	\$21.67	\$27.09	800
900	\$125.74	\$82.54	\$30.00	\$43.54	\$48.25	\$48.25	\$10.84	\$16.25	\$21.67	\$27.09	900
1000	\$139.72	\$94.80	\$30.00	\$43.54	\$58.05	\$53.84	\$10.84	\$16.25	\$21.67	\$27.09	1000
1100	\$153.70	\$107.06	\$30.00	\$43.54	\$58.05	\$59.43	\$10.84	\$16.25	\$21.67	\$27.09	1100
1200	\$167.68	\$119.32	\$30.00	\$43.54	\$58.05	\$65.02	\$10.84	\$16.25	\$21.67	\$27.09	1200
1300	\$181.66	\$131.58	\$30.00	\$43.54	\$58.05	\$70.62	\$10.84	\$16.25	\$21.67	\$27.09	1300
1400	\$195.64	\$143.84	\$30.00	\$43.54	\$58.05	\$72.56	\$10.84	\$16.25	\$21.67	\$27.09	1400
1500	\$209.62	\$156.10	\$30.00	\$43.54	\$58.05	\$72.56	\$10.84	\$16.25	\$21.67	\$27.09	1500
1600	\$223.60	\$168.36	\$30.00	\$43.54	\$58.05	\$72.56	\$10.84	\$16.25	\$21.67	\$27.09	1600
1700	\$237.58	\$180.62	\$30.00	\$43.54	\$58.05	\$72.56	\$10.84	\$16.25	\$21.67	\$27.09	1700
1800	\$251.56	\$192.88	\$30.00	\$43.54	\$58.05	\$72.56	\$10.84	\$16.25	\$21.67	\$27.09	1800
1900	\$265.54	\$205.14	\$30.00	\$43.54	\$58.05	\$72.56	\$10.84	\$16.25	\$21.67	\$27.09	1900
2000	\$279.52	\$217.40	\$30.00	\$43.54	\$58.05	\$72.56	\$10.84	\$16.25	\$21.67	\$27.09	2000
2100	\$293.50	\$229.66	\$30.00	\$43.54	\$58.05	\$72.56	\$10.84	\$16.25	\$21.67	\$27.09	2100
2200	\$307.48	\$241.92	\$30.00	\$43.54	\$58.05	\$72.56	\$10.84	\$16.25	\$21.67	\$27.09	2200
2300	\$321.46	\$254.18	\$30.00	\$43.54	\$58.05	\$72.56	\$10.84	\$16.25	\$21.67	\$27.09	2300
2400	\$335.44	\$266.44	\$30.00	\$43.54	\$58.05	\$72.56	\$10.84	\$16.25	\$21.67	\$27.09	2400
2500	\$349.42	\$278.70	\$30.00	\$43.54	\$58.05	\$72.56	\$10.84	\$16.25	\$21.67	\$27.09	2500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

Winter, Residential Electric Heat Service (Based on Rate R-H)

Family Size =2

Usage/Mo (KWh)	Rate R-H	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.38	\$11.04	\$30.00	\$30.00	\$30.00	\$30.00	\$10.84	\$16.25	\$21.67	\$27.09	100
200	\$29.64	\$16.96	\$30.00	\$30.00	\$30.00	\$30.00	\$10.84	\$16.25	\$21.67	\$27.09	200
300	\$41.90	\$22.88	\$30.00	\$30.00	\$30.00	\$30.00	\$10.84	\$16.25	\$21.67	\$27.09	300
400	\$54.16	\$28.80	\$30.00	\$30.00	\$30.00	\$30.00	\$10.84	\$16.25	\$21.67	\$27.09	400
500	\$66.42	\$34.72	\$30.00	\$30.00	\$30.00	\$30.00	\$10.84	\$16.25	\$21.67	\$27.09	500
600	\$78.68	\$40.64	\$30.00	\$31.47	\$31.47	\$31.47	\$10.84	\$16.25	\$21.67	\$27.09	600
700	\$89.85	\$51.68	\$30.00	\$33.89	\$33.89	\$33.89	\$10.84	\$16.25	\$21.67	\$27.09	700
800	\$95.90	\$57.60	\$30.00	\$36.31	\$36.31	\$36.31	\$10.84	\$16.25	\$21.67	\$27.09	800
900	\$101.95	\$63.52	\$30.00	\$38.73	\$38.73	\$38.73	\$10.84	\$16.25	\$21.67	\$27.09	900
1000	\$108.00	\$69.44	\$30.00	\$41.15	\$41.15	\$41.15	\$10.84	\$16.25	\$21.67	\$27.09	1000
1100	\$114.05	\$75.36	\$30.00	\$43.54	\$43.57	\$43.57	\$10.84	\$16.25	\$21.67	\$27.09	1100
1200	\$120.10	\$81.28	\$30.00	\$43.54	\$45.99	\$45.99	\$10.84	\$16.25	\$21.67	\$27.09	1200
1300	\$126.15	\$87.20	\$30.00	\$43.54	\$48.41	\$48.41	\$10.84	\$16.25	\$21.67	\$27.09	1300
1400	\$132.20	\$93.12	\$30.00	\$43.54	\$50.83	\$50.83	\$10.84	\$16.25	\$21.67	\$27.09	1400
1500	\$138.25	\$99.04	\$30.00	\$43.54	\$53.25	\$53.25	\$10.84	\$16.25	\$21.67	\$27.09	1500
1600	\$144.30	\$104.96	\$30.00	\$43.54	\$55.67	\$55.67	\$10.84	\$16.25	\$21.67	\$27.09	1600
1700	\$150.35	\$110.88	\$30.00	\$43.54	\$58.05	\$58.05	\$10.84	\$16.25	\$21.67	\$27.09	1700
1800	\$156.40	\$116.80	\$30.00	\$43.54	\$58.05	\$60.51	\$10.84	\$16.25	\$21.67	\$27.09	1800
1900	\$162.45	\$122.72	\$30.00	\$43.54	\$58.05	\$62.93	\$10.84	\$16.25	\$21.67	\$27.09	1900
2000	\$168.50	\$128.64	\$30.00	\$43.54	\$58.05	\$65.35	\$10.84	\$16.25	\$21.67	\$27.09	2000
2100	\$174.55	\$134.56	\$30.00	\$43.54	\$58.05	\$67.77	\$10.84	\$16.25	\$21.67	\$27.09	2100
2200	\$180.60	\$140.48	\$30.00	\$43.54	\$58.05	\$70.19	\$10.84	\$16.25	\$21.67	\$27.09	2200
2300	\$186.65	\$146.40	\$30.00	\$43.54	\$58.05	\$72.56	\$10.84	\$16.25	\$21.67	\$27.09	2300
2400	\$192.70	\$152.32	\$30.00	\$43.54	\$58.05	\$72.56	\$10.84	\$16.25	\$21.67	\$27.09	2400
2500	\$198.75	\$158.24	\$30.00	\$43.54	\$58.05	\$72.56	\$10.84	\$16.25	\$21.67	\$27.09	2500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

Summer, Residential Electric Heat Service (Based on Rate R-H)

Family Size =3

Usage/Mo (KWh)	Rate R-H	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.38	\$11.04	\$30.00	\$30.00	\$30.00	\$30.00	\$13.65	\$20.48	\$27.31	\$34.14	100
200	\$29.64	\$16.96	\$30.00	\$30.00	\$30.00	\$30.00	\$13.65	\$20.48	\$27.31	\$34.14	200
300	\$41.90	\$22.88	\$30.00	\$30.00	\$30.00	\$30.00	\$13.65	\$20.48	\$27.31	\$34.14	300
400	\$54.16	\$28.80	\$30.00	\$30.00	\$30.00	\$30.00	\$13.65	\$20.48	\$27.31	\$34.14	400
500	\$66.42	\$34.72	\$30.00	\$30.00	\$30.00	\$30.00	\$13.65	\$20.48	\$27.31	\$34.14	500
600	\$78.68	\$40.64	\$31.47	\$31.47	\$31.47	\$31.47	\$13.65	\$20.48	\$27.31	\$34.14	600
700	\$97.78	\$58.02	\$36.58	\$37.06	\$37.06	\$37.06	\$13.65	\$20.48	\$27.31	\$34.14	700
800	\$111.76	\$70.28	\$36.58	\$42.66	\$42.66	\$42.66	\$13.65	\$20.48	\$27.31	\$34.14	800
900	\$125.74	\$82.54	\$36.58	\$48.25	\$48.25	\$48.25	\$13.65	\$20.48	\$27.31	\$34.14	900
1000	\$139.72	\$94.80	\$36.58	\$53.84	\$53.84	\$53.84	\$13.65	\$20.48	\$27.31	\$34.14	1000
1100	\$153.70	\$107.06	\$36.58	\$54.86	\$59.43	\$59.43	\$13.65	\$20.48	\$27.31	\$34.14	1100
1200	\$167.68	\$119.32	\$36.58	\$54.86	\$65.02	\$65.02	\$13.65	\$20.48	\$27.31	\$34.14	1200
1300	\$181.66	\$131.58	\$36.58	\$54.86	\$70.62	\$70.62	\$13.65	\$20.48	\$27.31	\$34.14	1300
1400	\$195.64	\$143.84	\$36.58	\$54.86	\$73.15	\$76.21	\$13.65	\$20.48	\$27.31	\$34.14	1400
1500	\$209.62	\$156.10	\$36.58	\$54.86	\$73.15	\$81.80	\$13.65	\$20.48	\$27.31	\$34.14	1500
1600	\$223.60	\$168.36	\$36.58	\$54.86	\$73.15	\$87.39	\$13.65	\$20.48	\$27.31	\$34.14	1600
1700	\$237.58	\$180.62	\$36.58	\$54.86	\$73.15	\$91.44	\$13.65	\$20.48	\$27.31	\$34.14	1700
1800	\$251.56	\$192.88	\$36.58	\$54.86	\$73.15	\$91.44	\$13.65	\$20.48	\$27.31	\$34.14	1800
1900	\$265.54	\$205.14	\$36.58	\$54.86	\$73.15	\$91.44	\$13.65	\$20.48	\$27.31	\$34.14	1900
2000	\$279.52	\$217.40	\$36.58	\$54.86	\$73.15	\$91.44	\$13.65	\$20.48	\$27.31	\$34.14	2000
2100	\$293.50	\$229.66	\$36.58	\$54.86	\$73.15	\$91.44	\$13.65	\$20.48	\$27.31	\$34.14	2100
2200	\$307.48	\$241.92	\$36.58	\$54.86	\$73.15	\$91.44	\$13.65	\$20.48	\$27.31	\$34.14	2200
2300	\$321.46	\$254.18	\$36.58	\$54.86	\$73.15	\$91.44	\$13.65	\$20.48	\$27.31	\$34.14	2300
2400	\$335.44	\$266.44	\$36.58	\$54.86	\$73.15	\$91.44	\$13.65	\$20.48	\$27.31	\$34.14	2400
2500	\$349.42	\$278.70	\$36.58	\$54.86	\$73.15	\$91.44	\$13.65	\$20.48	\$27.31	\$34.14	2500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

Winter, Residential Electric Heat Service (Based on Rate R-H)

Family Size =3

Usage/Mo (KWh)	Rate R-H	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.38	\$11.04	\$30.00	\$30.00	\$30.00	\$30.00	\$13.65	\$20.48	\$27.31	\$34.14	100
200	\$29.64	\$16.96	\$30.00	\$30.00	\$30.00	\$30.00	\$13.65	\$20.48	\$27.31	\$34.14	200
300	\$41.90	\$22.88	\$30.00	\$30.00	\$30.00	\$30.00	\$13.65	\$20.48	\$27.31	\$34.14	300
400	\$54.16	\$28.80	\$30.00	\$30.00	\$30.00	\$30.00	\$13.65	\$20.48	\$27.31	\$34.14	400
500	\$66.42	\$34.72	\$30.00	\$30.00	\$30.00	\$30.00	\$13.65	\$20.48	\$27.31	\$34.14	500
600	\$78.68	\$40.64	\$31.47	\$31.47	\$31.47	\$31.47	\$13.65	\$20.48	\$27.31	\$34.14	600
700	\$89.85	\$51.68	\$33.89	\$33.89	\$33.89	\$33.89	\$13.65	\$20.48	\$27.31	\$34.14	700
800	\$95.90	\$57.60	\$36.31	\$36.31	\$36.31	\$36.31	\$13.65	\$20.48	\$27.31	\$34.14	800
900	\$101.95	\$63.52	\$36.58	\$38.73	\$38.73	\$38.73	\$13.65	\$20.48	\$27.31	\$34.14	900
1000	\$108.00	\$69.44	\$36.58	\$41.15	\$41.15	\$41.15	\$13.65	\$20.48	\$27.31	\$34.14	1000
1100	\$114.05	\$75.36	\$36.58	\$43.57	\$43.57	\$43.57	\$13.65	\$20.48	\$27.31	\$34.14	1100
1200	\$120.10	\$81.28	\$36.58	\$45.99	\$45.99	\$45.99	\$13.65	\$20.48	\$27.31	\$34.14	1200
1300	\$126.15	\$87.20	\$36.58	\$48.41	\$48.41	\$48.41	\$13.65	\$20.48	\$27.31	\$34.14	1300
1400	\$132.20	\$93.12	\$36.58	\$50.83	\$50.83	\$50.83	\$13.65	\$20.48	\$27.31	\$34.14	1400
1500	\$138.25	\$99.04	\$36.58	\$53.25	\$53.25	\$53.25	\$13.65	\$20.48	\$27.31	\$34.14	1500
1600	\$144.30	\$104.96	\$36.58	\$54.86	\$55.67	\$55.67	\$13.65	\$20.48	\$27.31	\$34.14	1600
1700	\$150.35	\$110.88	\$36.58	\$54.86	\$58.09	\$58.09	\$13.65	\$20.48	\$27.31	\$34.14	1700
1800	\$156.40	\$116.80	\$36.58	\$54.86	\$60.51	\$60.51	\$13.65	\$20.48	\$27.31	\$34.14	1800
1900	\$162.45	\$122.72	\$36.58	\$54.86	\$62.93	\$62.93	\$13.65	\$20.48	\$27.31	\$34.14	1900
2000	\$168.50	\$128.64	\$36.58	\$54.86	\$65.35	\$65.35	\$13.65	\$20.48	\$27.31	\$34.14	2000
2100	\$174.55	\$134.56	\$36.58	\$54.86	\$67.77	\$67.77	\$13.65	\$20.48	\$27.31	\$34.14	2100
2200	\$180.60	\$140.48	\$36.58	\$54.86	\$70.19	\$70.19	\$13.65	\$20.48	\$27.31	\$34.14	2200
2300	\$186.65	\$146.40	\$36.58	\$54.86	\$72.61	\$72.61	\$13.65	\$20.48	\$27.31	\$34.14	2300
2400	\$192.70	\$152.32	\$36.58	\$54.86	\$73.15	\$75.03	\$13.65	\$20.48	\$27.31	\$34.14	2400
2500	\$198.75	\$158.24	\$36.58	\$54.86	\$73.15	\$77.45	\$13.65	\$20.48	\$27.31	\$34.14	2500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

For complete bill comparisons that can be used as look-up tables, see Sections XIII through XIX.

Sector Maps

VI. AFFORDABILITY: SECTOR MAPS

Low-income households in the range from 1% to 50% of the Federal Poverty Level exist not in only one economic circumstance, but in several. For example, life with income at 50% of the Federal Poverty Level is considerably better than circumstance when income is below 20% of the Federal Poverty Level. The Reichmuth Sector Map[©] is used to review the program participants over the whole range of population variation. In comparison with previous analytic methods, this approach permits a much more exact accounting of affordability.

Prior to the use of Sector Maps, the primary tools for understanding the effects of program designs were considerably weaker. These older tools consist of the calculation of averages (means, medians, or modes).²⁰ Using the prior tools, a program approach could be demonstrated to work on average. But Universal Service law, orders, and guidelines are by definition intended to apply equally, not simply to work for the average customer. Particularly today, when we acknowledge and understand the value and reality of diversity, working “on average” or for a “typical customer” is simply not the relevant criterion. An affordability criterion requires equality of application

The Reichmuth Sector Map[©] program as tailored for this study produces a set of conformance maps and associated summary maps. Each map distributes the Customer Assistance Program population uniformly into a graphical format or grid. For this study, each square of the grid in the electric part of the analysis represents approximately 73 households. One axis of each map (the horizontal or “x-axis”) represents income level; the vertical (or “y-axis”) of each map represents energy usage.²¹ When the program population is organized in this manner, patterns in program indicators, such as energy burden (expressed as energy bill as percent of income)

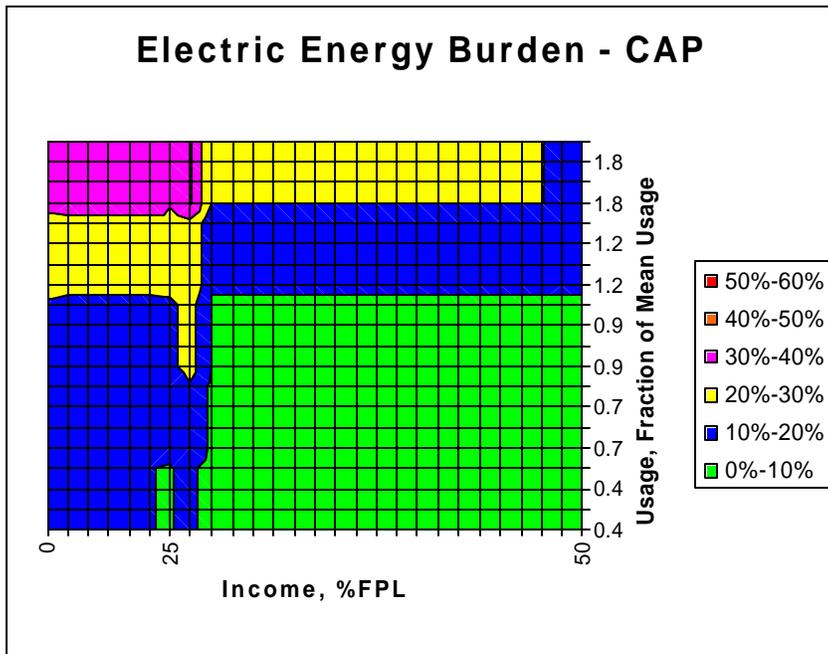
²⁰ Distributional effects were typically shown by ‘stem and leaf’ plots, and the like.

²¹ The horizontal axis shows customer income expressed as a percentage of the Federal Poverty Level. The vertical axis shows relative energy use (actual usage divided by the population mean usage).

become quite evident. The sector maps shown in Figures VII-1 and VII-2 illustrate the use of the Reichmuth Sector Map applied to the current CAP program population.

Figure VI-1 shows the energy burden as percent of income for the current CAP population at 50% FPL and below. Most of the participants with incomes above 25% FPL, the right hand portion of the graph, have energy burdens in the range of 0-10% of income shown as a green area. The participants with the highest usage in this right hand portion are shown in the upper right with monthly bills in the range of 10% - 30% of income.

Figure VI-1: Energy Burden in Current CAP Rate 1-50% of Poverty.



In Figures VI-1 and VI-2 each square represents 73 participant households. Counting the violet squares in Figure VI-1 in the upper left which show energy burdens of 30-40%, 21 squares indicate that about 1533 current CAP participants have energy burdens of 30-40% of income.

Figure VI-2 is used to show conformance with affordability as defined by the Pennsylvania Code. In this figure, the colored area in the lower right shows the portion of the 1-50% CAP participants in conformance with the CAP design elements. The un-shaded area shows that most households face electric bills not in conformance. In fact, that only 15% of the current 1-50% CAP program participants are within conformance. The participants within conformance are shown to be those with usage well below the average and incomes higher than 25%FPL.

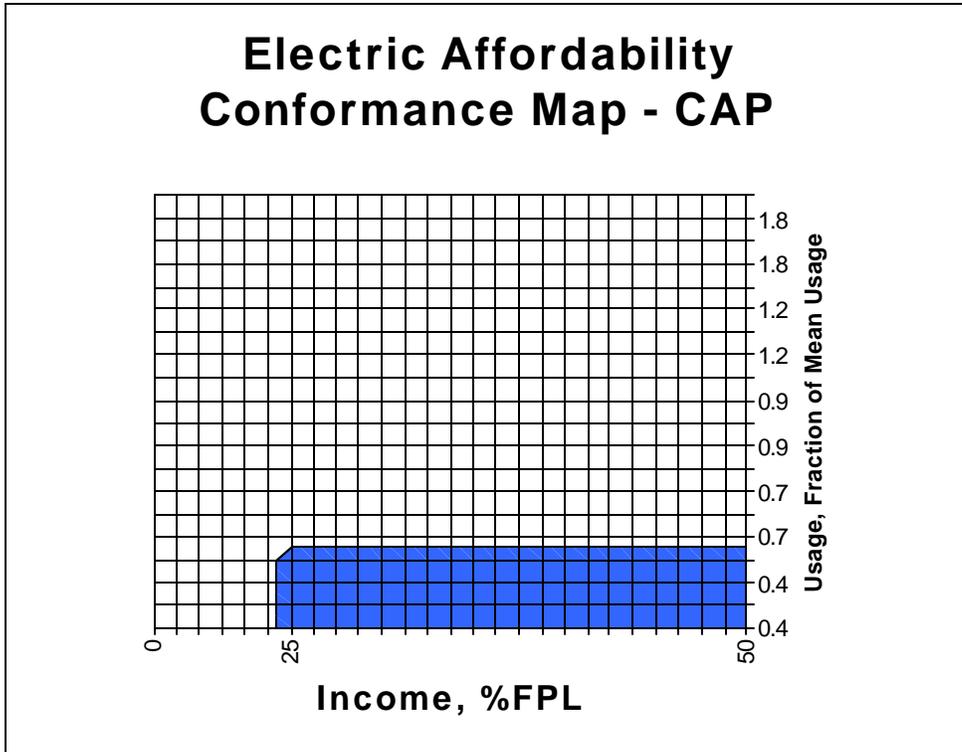


Figure VI-2: Conformance of Current CAP Rate for 1-50%.

A. The Study Set: A Model Built on Actual PECO Data

Essentially the Sector Map is a simple model of the program population. Underlying the tailored application of the model is a set of detailed statistics describing the characteristics of the CAP-Rate program population in terms of distributions of income, poverty level Classification and energy usage. These characteristic distributions are derived from a study set consisting of 13,524 participants identified as current CAP participants in the Evaluation Database²². This study set contains all CAP participants with all the usage and income information required for developing the income and usage distributions used to characterize the population.

The characteristic distributions thus derived from the study set are general, and apply to the full current CAP population and to variations of this population associated with different program growth rates. The characteristic distributions are also detailed enough to support billing estimates of alternative program designs applied to the population. In this analysis the Sector Map is used first to document the detailed affordability situation facing current CAP

²² The distributions represent 34% of the 39,469 CAP participants (averaged over 12 months) reported by PECO in the 2000 Reporting Requirements.

participants. Then it is used to explore the affordability associated with alternative program designs.

To contrast alternative program designs, both a graphical form (a conformance map) and two numerical indicators are used. The numerical indicator for the dollar impact is the *difference* of the aggregate CAP Discount amounts of two contrasted program designs (the “ΔCAP discount”) *with the Residential Rate held constant*.²³ In this analysis the CAP Discount is defined as the Residential revenue that would have been due minus the CAP revenue actually billed (Figure VI-4).²⁴ The important point to note is that the *change* in CAP discount is used to contrast and optimize designs. Note also in this definition of the Discount that no LIHEAP payments are included. This exclusion is for convenience. It allows a focus on the basic components of the program billing design with the LIHEAP collection effort considered equal between the reference case and the alternatives.²⁵

²³ A number of different metrics could be used with equivalence. The metric “ΔCAP discount *with constant Residential Rate*” is simple and straightforward and the “delta” values tend to exhibit high stability across different estimates of program costs.

²⁴ The design metric used in this study follows from definitions included in the document, *Universal Service Reporting Requirements, Data Dictionary and Clarifications Offered by BCS*. The CAP Discount, as calculated here, is *modeled on but not identical to* the (Total) CAP Credit. The total CAP Credit is, in the first instance, the sum of the CAP credits for all customers who received CAP credits. As a first approximation, it is the difference between the standard billed amount and the CAP billed amount. For example, if the billed amount under the residential rate were \$100 and the CAP billed amount were \$30, the CAP credit equals \$70. Preprogram arrearage forgiveness is not considered in this total. However, the calculation of the CAP Credit would include third party payments in the calculation, such as LIHEAP grants and hardship fund grants. The CAP Discount used in this report is a simplified CAP Credit. It excludes consideration of third party payments. It also excludes current CAP arrearage (payment rates of less than 100% of bill). Other metrics could be used equally well. However, the essential point regarding the CAP Discount and ?CAP Discount as developed for this study is that they are based on billing and do not include either CAP program arrearages (that is, payment rates of less than 100%) or LIHEAP and similar payments. These factors do not affect the development of program design. Use of simplified CAP Discount and ?CAP Discount versions of the CAP Credit facilitate the analysis and presentation.

²⁵ Conformance with the Pennsylvania Code CAP design elements is, in any case, separate from the objective of maximizing LIHEAP grant assignments.

Calculation of “Bottom-Up” ΔCAP Discount (Billing Basis)

$$\text{CAP Discount}_1 = \text{GS Revenue Billed}_1 - \text{CAP Revenue Billed}_1$$

$$\text{CAP Discount}_2 = \text{GS Revenue Billed}_2 - \text{CAP Revenue Billed}_2$$

$$\Delta\text{CAP Discount} = (\text{CAP Discount}_1 - \text{CAP Discount}_2)$$

Figure VI-3: “DCAP Discount” as used in Comparisons

Specifically, the ΔCAP Discount expressed in dollars is the difference in the aggregate CAP Discount between the two cases. The ΔCAP Discount percent is the ΔCAP Discount for the alternative design divided by the CAP discount for the original design. For the purposes of this analysis the definition of affordability is aligned with the formal definition of an affordable utility bill as given in Pa Code, Title 52 section 69.265. [This is the definition given under the Section of PIPP programs.] These formal criteria of affordability as applied to the 0-50% FPL are summarized in Figure 29. (J is the rate rider denoting CAP 1 for 0-100% poverty.)

CAP RATE	Minimum Bill	Maximum % Income
RJ (electric baseload)	\$12 -- \$15	2% -- 5%
RHJ (electric heat)	\$30 -- \$40	7% -- 13%
RJ / HJ (electric baseload with gas heat)		
HJ (gas heat)	\$18 -- \$25	5% -- 8%

Figure VI-4: Affordability for CAP participants with Incomes less 50% of FPL

For the purposes of evaluation, the top of the ranges will be used. For example, referring to Figure VI-4, a rate RJ utility bill is defined as affordable if it is less than 5% of the participant’s income and at least \$15. This is a conservative assumption.

Although this definition of affordability is a formal one that also approximately expresses the practical reality facing low-income customers Therefore, this definition has been used for the affordability compliance criteria in the Affordability Conformance Sector Maps. Again, affordability has been set at the high end of the ranges.

B. Current Affordability

Using this conservative specification, the energy affordability situation facing current electric CAP participants is shown in Figures VI-1 and VI-2. These figures show that the only current electric CAP program participants with affordable electric bills are those with very low usage and with incomes above 25% FPL. Only about 15% of current CAP 0-50% FPL participants currently have affordable electric bills under CAP Rate. If these participants were not in the CAP program, they would face an average energy burden of 21%. Fifteen percent of the participants, those with the lowest incomes would face electric bills in excess of 30% of income. Without the CAP Rate program, none of the electric bills presented to this population would be affordable. Clearly, the electric bills presented to customers at or below 50% FPL predominantly exceed the affordability criteria. Almost all of the bills presented to non-CAP customers in this population are not affordable. Only fifteen percent of the bills for CAP Rate participants are affordable.

The situation facing gas CAP program participants in the 1 to 50% FPL range is illustrated in Figure VI-5, a sector map of the gas energy burden for these participants. Note that the sector maps for gas CAP participants or gas and electric CAP participants cover a much smaller number of participants (6,210), and therefore each square in the sector map represents 12 households.

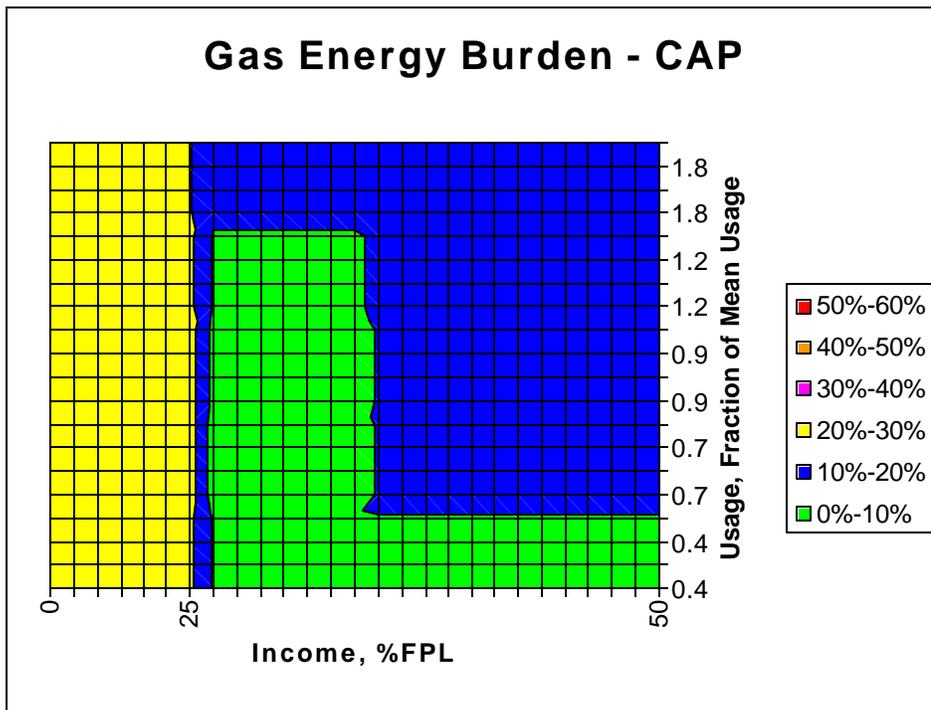


Figure VI-5: Gas Energy Burden.

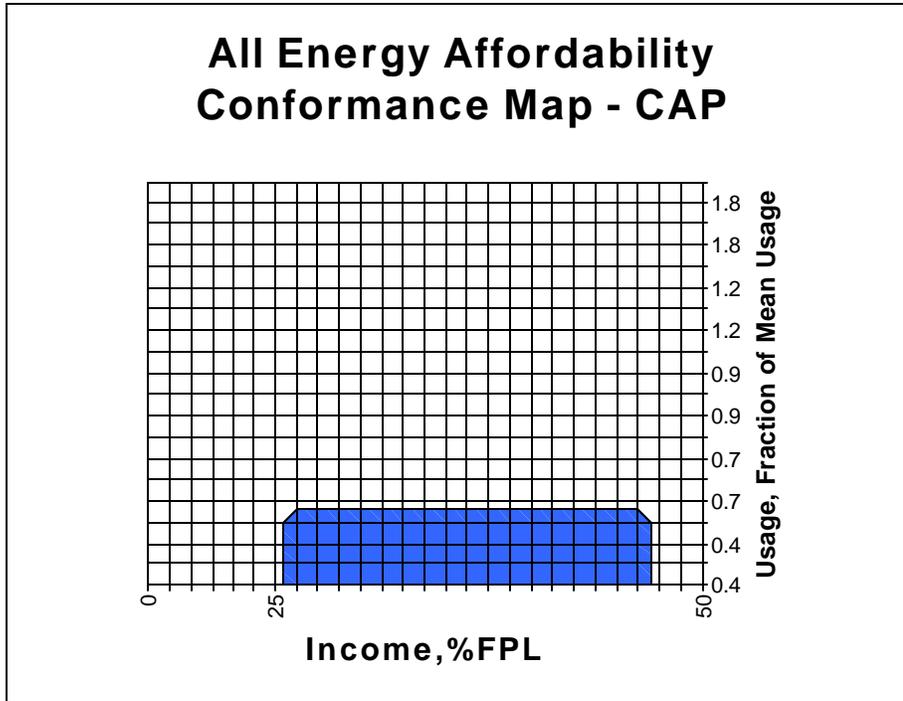


Figure VI-6: All Energy Affordability

Gas energy burdens for these participants range from 10% to 25%. 10% of the gas CAP participants see gas energy bills that meet the gas energy affordability criteria, though the participants with the highest incomes and lowest gas use almost fit the affordability criteria.

Total energy affordability conformance for PECO gas and electric customers with CAP rates is shown in Figure VI-6. This figure shows that gas and electric CAP participants with incomes above 25% FPL and with below average usage do fall within the affordability guidelines. In all, 14% of the current gas and electric CAP participants fall within the affordability criteria.

C. Steps Toward Electric Bill Affordability

The next step in the analysis of electric bill affordability is to explore and test modified CAP Rate designs and other program alternatives against the affordability criteria in Figure VI-4. The current CAP Rate program designated as Step 0 in Figure VI-7 (Step 0 is shown in graphical form in Figure VI-2). The program design is then modified one step at a time in an attempt to increase the number of participants in conformance with the affordability criteria of the Pennsylvania Code (Figure VI-4). The affordability optimization criterion is “Fraction in conformance,” in the final column of Figure IV-7. Cost optimization is given by “Delta %.”

Step No.	Design Change	Aggregate Delta CAP Discount (low bound 39,500)	Aggregate Delta CAP Discount (high bound 90,000)	Delta% (Low Bound)	Electric Bill % Discount from Res	Fraction in Conformance
Step 0	Current CAP	\$0	\$19,774,916	0.0%	35.9%	15.3%
Step 1	Increase eligible kWh to 2000/mo	\$4,834,132	\$30,789,393	31.3%	48.4%	15.3%
Step 2	Increase discount to 60%	\$9,391,008	\$41,172,149	46.3%	60.0%	16.9%
Step 3	Increase discount to 70%	\$13,281,301	\$50,036,109	53.4%	70.0%	50.6%
Step 4	Increase discount to 77%	\$15,852,455	\$55,894,434	55.7%	77.0%	73%
PIPP (reference case)		\$15,852,455	\$55,894,434	50.4%	72.4%	100%

Figure VI-7: Steps Toward Electric Bill Affordability

Data and calculations for Figure VI-7 are based on all CAP Rate customers provided by PECO for the evaluation database with poverty recorded from 1% through 50% of the Federal Poverty Level who are also recorded as on a “J” Rate (that is, who are billed within the first tier of the current two-tier discount). The dollar values reported have not been subjected to a final true-up with PECO financial records and so may vary from PECO estimates depending on assumptions, however the “Delta %” values are stable (will not change when the true-up is carried out). For simplification, LIHEAP is not included, nor are program administration and program savings offsets.

In Step 1 the eligible monthly kWh subject to the CAP Rate is increased from 500kWh/mo to 2000 kWh/mo. This removes the “500 kWh limit” for RJ and RHJ customers whose incomes are below 50% of the poverty guidelines (Figure VI-8). The CAP discount would be approximately 31.3% higher than the alternative of no change to the current CAP Rate design. The increase in affordability is negligible (Figure VI-8).

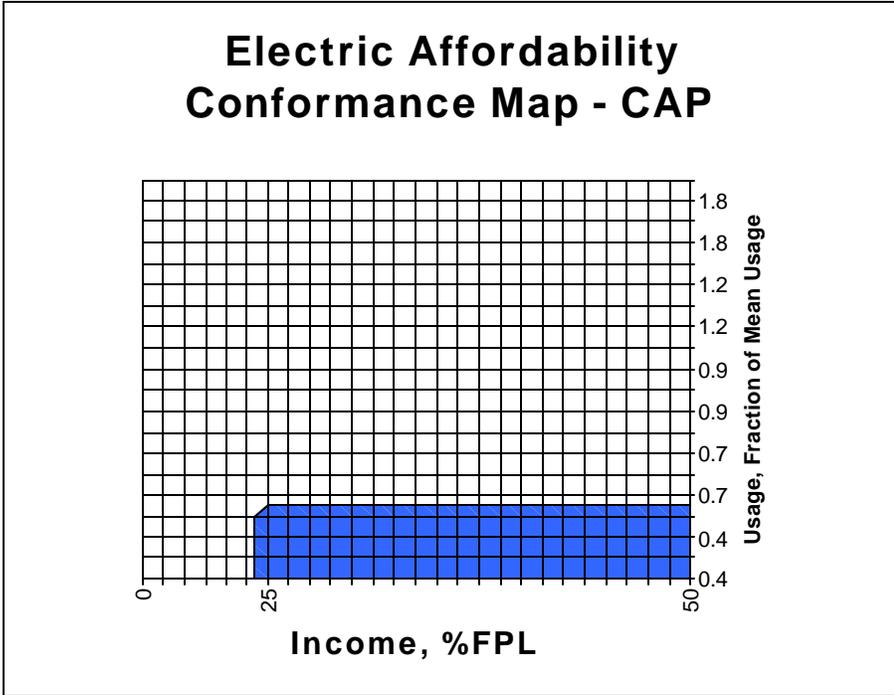


Figure VI-9: Step 1: Increase kWh Limit from 500 to 2000 kWh/mo.

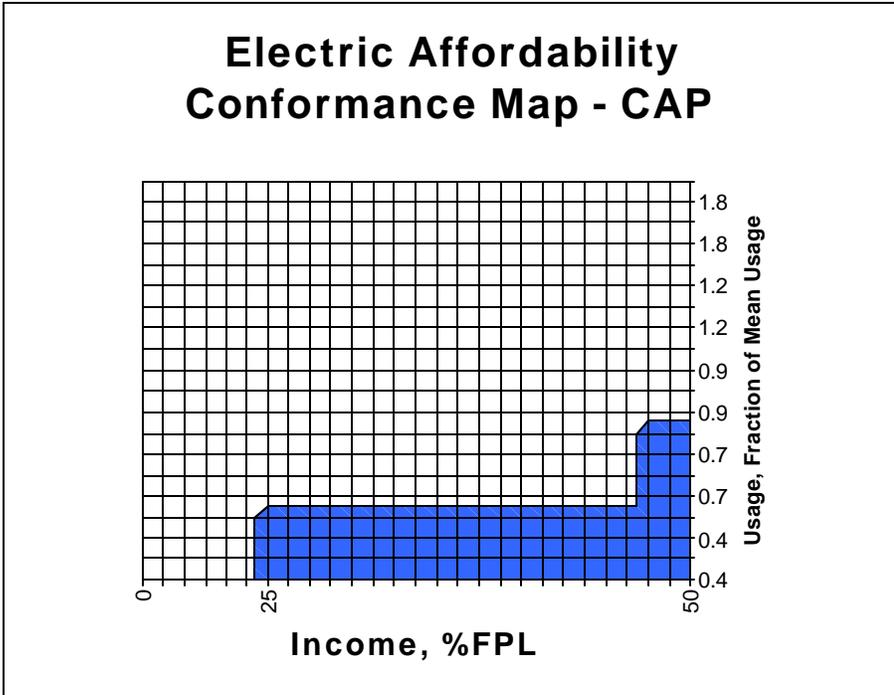
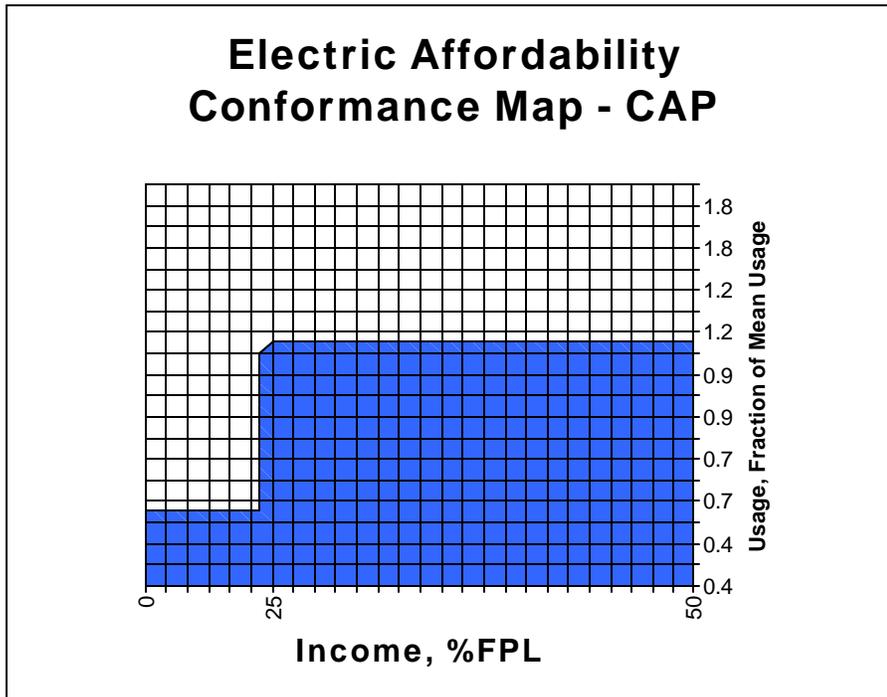


Figure VI-8: Step 2 -- Increase Discount from 35% to 60%.

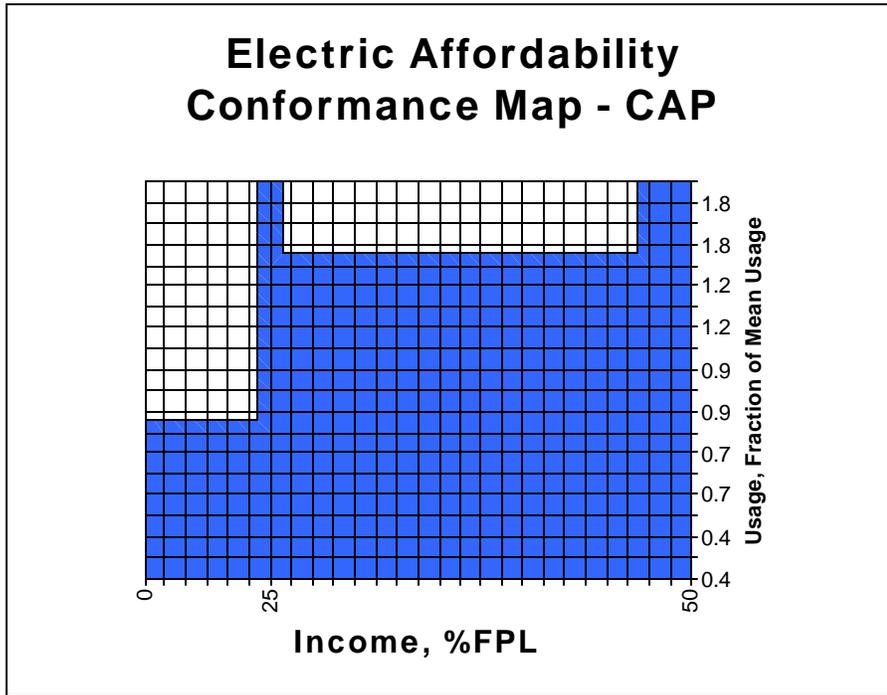
Figure VI-10: Step 2 - Increase Discount for 35% to 70%.



In Step 2 the CAP rate is reduced so that the average CAP Rate electric bill is reduced from the current 35.5% of the bill under the standard rate to 60% (Figure VI-9). This large change only slightly increases the number of participants in conformance with the affordability criteria.

In Step 3 the CAP Rate is further reduced so that the average CAP Rate electric bill is reduced from 35.5% of the bill under the standard rate to 70% (Figure VI-10). This step brings 50% of the participants into conformance with the affordability criteria.

Figure VI-11: Step 4 -- Increase Discount from 35% to 77%.



In Step 4, the CAP Rate is again further reduced from 35.5% of the bill under the standard rate to 77%.

Even a drastically reduced CAP Rate for the group of customers at or below 50% of the Federal Poverty Level still leaves about 27% of customers (including those with the lowest incomes and higher usage) facing electric bills exceeding the affordability definition of the Pennsylvania Code.

Setting a common discount for a large block of customer (as in the current two-tier structure of CAP Rate) poses a contradictory situation. If the CAP Rate is set low enough to bring households in the lower regions of the block into conformance with affordability of bills as defined by the Pennsylvania Code, then the rate will be too low for the middle to upper part of the block. Households in those ranges will enjoy a free ride on rates that are set well below where they would be placed according to the affordability criteria. There are two ways to control this problem: add several tiers, or go to a Percentage of Income Payment Plan (PIPP) design.

This step demonstrates that there is a significant diminishing return from lowering a CAP Rate. This diminishing return effect illustrates that the CAP Rate is structurally incompatible with the affordability conformance criteria.

The PIPP reference case (Figure VI-7, bottom row) produces 100% conformance with the affordability of bill definitions of the Pennsylvania Code. The Conformance Map for the PIPP would be entirely blue. From a billing perspective, it substantially reduces under billing of customers compared to a CAP Rate design with large rate blocks. The PIPP reference program illustrated here is exactly aligned with the affordability criteria and represents the maximum billings that can be collected consistent with the affordability criteria.²⁶

²⁶ Mathematical Proof: A mathematical proof that the PIPP rate design yields the maximum aggregate billing consistent with an affordable rate is, briefly, as follows: the billings for any rate design will include a portion comprised of over billings and a portion comprised of under billings relative to the affordability criteria. For rate designs that fully comply with the affordability criteria, the over billed portion is zero and the billing difference between rates rests in the under billed portion. For the case of a rate exactly congruent with the affordability criteria the under billed portion is also equal to zero. This congruent rate therefore represents the highest aggregate billing that can be associated with a fully affordable rate. This is the rate tailored to each household, the PIPP.

Step No.	Design	Aggregate Delta CAP Discount from Res low bound	Aggregate Delta CAP discount high bound	Delta%	Gas % bill discount from Res	Fraction in Conformance
Step 0	Current CAP	\$0	\$1,940,807	0.0%	29.3%	9.8%
Step 1	Average discount from 30% to 69%	\$1,846,550	\$6,148,136	121.6%	65.0%	81.3%
Alt. Step	PIPP reference case	\$1,629,776	\$5,654,220	107.4%	60.8%	100%

Figure VI-12: Steps Toward Gas Bill Affordability.

D. Steps Toward Gas Bill Affordability

Gas CAP Rate participants will have gas bills that meet the affordability criteria if the gas CAP Rate is significantly reduced. Figure VI-12 summarizes the effects of a stepwise reduction in gas CAP Rate in a manner similar to that applied to the electric CAP Rate.

Step 0 represents the current gas CAP Rate. In Step 1 the gas CAP Rate is markedly reduced so that gas bills are reduced from standard gas bills by 65% instead of the current gas CAP reduction of 30%. Even with this large reduction, approximately 19% of the gas CAP participants remain outside the affordability criteria.

The same diminishing returns phenomenon applies to the gas CAP Rate as to the electric CAP Rate. Note in Figure VI-12 a gas PIPP presents affordable bills to 100% of the gas CAP participants yet it reduces the average gas bill by only 61% instead of the 65% reduction tested in Step 1.

Here again, a PIPP Rate exactly congruent with the affordability criteria will produce the highest bills consistent with the affordability criteria. As demonstrated in this Section of the study, for both electric and natural gas service, the PIPP approach is the least-cost alternative over a CAP Rate approach. It also better fits the affordability parameters of the Pennsylvania Code.

The CAP Rate approach cannot approximate this result unless it is split into many tiers. However, in that case, it approximates a PIPP in the limit. From the customer, least-cost to the Company, and regulatory compliance perspectives, a PIPP approach is the better approach and superior to CAP Rate.

E. Summary

The current CAP Rate simply does not work in relation to actual customer household incomes and energy use for customers with lower incomes and higher energy use. In fact, it does not work for most customers below 50% of the Federal Poverty Level.

There are three ways to bring PECO's CAP into conformance with affordability as defined in the Pennsylvania Code:

The two-tier structure of CAP Rate may be kept, with bottom tier discount percentage dramatically raised. This will result in substantial under-billing (free ridership).

Several tiers may be added in the range from 1-50% of the Federal Poverty Level with a structure of increasing discounts for lower income sub-ranges. This will work but will still result in under billing (free ridership).

The 1-50% range may be shifted to a PIPP approach. This is the optimal approach that minimizes affordability problems and minimizes under billing.

Section
VII

Payment

VII. BILLS & PAYMENTS: PAYMENT BEHAVIOR

Payment is the key to whether a CAP program succeeds or fails, and this is true from all perspectives. The utility must be concerned with the bottom line of payment for service. Yet it is not a maximum payment today, but a workable payment and a stable relationship that is in the long-run interest of the utility.²⁷ Generally, society expects people to pay for their consumption – if not the full cost, still some payment. From a societal perspective, it is the principle of payment that is important rather than the amount. From the perspective on other customers – the “non-participants” to whom the costs are allocated there is a desire to minimize program cost. That means insuring the maximum return to the Company consistent with sound program design, and insuring that the design is as optimal as possible so that benefits do not go to households that do not need them but do reach those for whom they are intended.

The Percentage of Income Payment (PIPP) approach provides the most transparent, exact, and appropriate program design approach for this accounting. PECO’s Customer Assistance Pilot and Customer Assistance Program followed a PIPP design from 1984 to April 1992. From 1992 to 1998, PECO implemented a Percentage of Bill (POB) approach modified to a combination Percentage of Income/Percentage of Bill design (POB/PIPP). PECO’s Customer Assistance Program followed a CAP Rate design beginning in 1998.²⁸

Analysis in this section of the study remains at an annual level, rather than a monthly level and we could not construct the measures usually looked for in this part of the analysis by the Bureau of Consumer Services due to the form in which revenue data was provided. This is discussed in the last part of this section of the study and also noted in the discussion of data issues in Section XX. To compensate for these interim data problems, an annual analysis has been carried out. By including a full calendar year in the analysis, the problems generated at a monthly level largely cancel out.

²⁷ As with any other rate, payment of the amount *actually* billed is accepted as payment in full. The “CAP credit” (in comparison to the standard tariff) is an internal concept, the difference between the amount actually billed to a CAP participant and the comparable bill at the standard tariff. Sometimes the “CAP Credit” is referred to as the “shortfall,” but this term is going out of use.

²⁸ A pilot CAP Rate began in 1996.

A. Analysis

Customers analyzed in this section of the study are stable participants in CAP Rate for the year 2000. They were required to be in CAP for the full calendar year 2000. Those CAP customers with less than twelve months of participation in 2000 were excluded. To be included, customer records were required to have a “J” rider to be certain they were within the first tier of CAP Rate, and to have a “J” rider or an implied “J” rider (using the rolling rider method) for each month of the year 2000. Cases without the “J” rider were excluded. Customer records were also required to have a poverty level from 1 to 50% of the Federal Poverty Level. Cases with “0” poverty, cases with missing poverty data, and cases above 50% of the Federal Poverty Level were excluded (since “0” is used administratively for CAP customers for whom poverty data is not known). These are stable CAP participants in the range of 1-50% of the Federal Poverty Level who are on the appropriate rate.

Figure VIII-1 shows the CAP status in December of 2000 of all customers who had a CAP J rider in at least one month of the year 2000, and a poverty level from 1 to 50%. The group of cases analyzed and discussed in this portion of the study is that with a full twelve months of CAP J coded usage, with from 1 to 50% poverty level, and with data in both Revenue (billing) and Offset (payment and other credits) files made available for evaluation. Note that 10,613 cases qualify under the restrictions applied for this section.

CAP Status in December 2000 (Cases with at least One Month in CAP J in 2000)					
Number of months CAP J	Cases	CAP J	CAP K	No Service	Standard Rate
1	680	612	10	0	58
2	618	524	9	5	80
3	724	645	8	7	64
4	863	721	6	1	135
5	780	583	27	1	169
6	608	556	25	4	23
7	501	476	9	4	12
8	611	560	11	7	33
9	685	488	5	5	187
10	850	562	3	7	278
11	902	605	4	5	288
12	10,613	10,613	0	0	0
Total	18,435	16,945	117	46	1,327

Figure VII-1: Status in December 2000

The distribution of these cases across four poverty ranges is shown in Figure VII-2.

CAP Participation Year 2000 Number of Months in CAP J Percent Poverty Level					
Number of months CAP J	Cases	1-20% Poverty	21 - 30% Poverty	31 - 40% Poverty	41 - 50% Poverty
1	680	63	187	294	136
2	618	56	174	260	128
3	724	76	204	314	130
4	863	74	220	388	181
5	780	60	177	370	173
6	608	63	140	247	158
7	501	47	134	211	109
8	611	55	154	281	121
9	685	65	174	281	165
10	850	64	210	331	245
11	902	86	228	360	228
12	10,613	1,014	2,917	4,204	2,478
Total	18,435	1,723	4,919	7,541	4,252

Figure VII-2: Months & Poverty Subgroup.

The focus of this section of the study is on billing and payment activity for the year 2000 as monthly calendar events, totaled to an annual basis. Table VII-3 shows that 10,599 customers were billed a total of \$9,818,473.62 during 2000. Closer examination shows there are 579 customers billed above \$1,959, identified as a statistically “extreme” value and six customers were billed below zero dollars.

The basis for determining monthly bills is as follows. Since PECO does not maintain customer bill (“please pay”) amounts in its computer, it was necessary to calculate bills from full billing components parts of the evaluation database provided by PECO. Billed amounts were computed using Offset and Revenue data as follows: Revenue (Standard Bills + Straggler Bills + Final Bills) – Offsets (Sales Tax Cancellation + Shortage + Supplier Cancellation + Cancellation of Billing + Cash Adjustment + Credit Revenue Adjustment + Deposit and Interest Applied + Final Bill Credit Adjustment + Final Bill Transfer + Former Address Transfer + General Journal Entry + Internal priority 049 adjustment + Late Charge Cancellation + Miscellaneous + Overage + Partial Cancellation + Petty Cash + Priority 049 generated internally + Refund Check Cancellation + Refund Final Balance + Transfer - Form 2). Results are shown on an annual basis in Figure VII-3. Results are graphed in Figure VII-4.

Removing the extremes and cases billed less than zero shows that the mean annual billing is \$721.95 for the 10,014 customers represented who were in CAP all 12 months in 2000 (Figure VII-3).

CAP J Billed Amounts 12 Months in CAP: Year 2000 1 – 50% Poverty						
	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Billed	10,599	3369.24	77263.79	9,818,473.62	926.35	1820.03
Billed, trimmed cases	10,014	63.51	1958.93	7,229,649.75	721.95	404.08

Figure VII-4: CAP J – Bills -12 Months in Program.

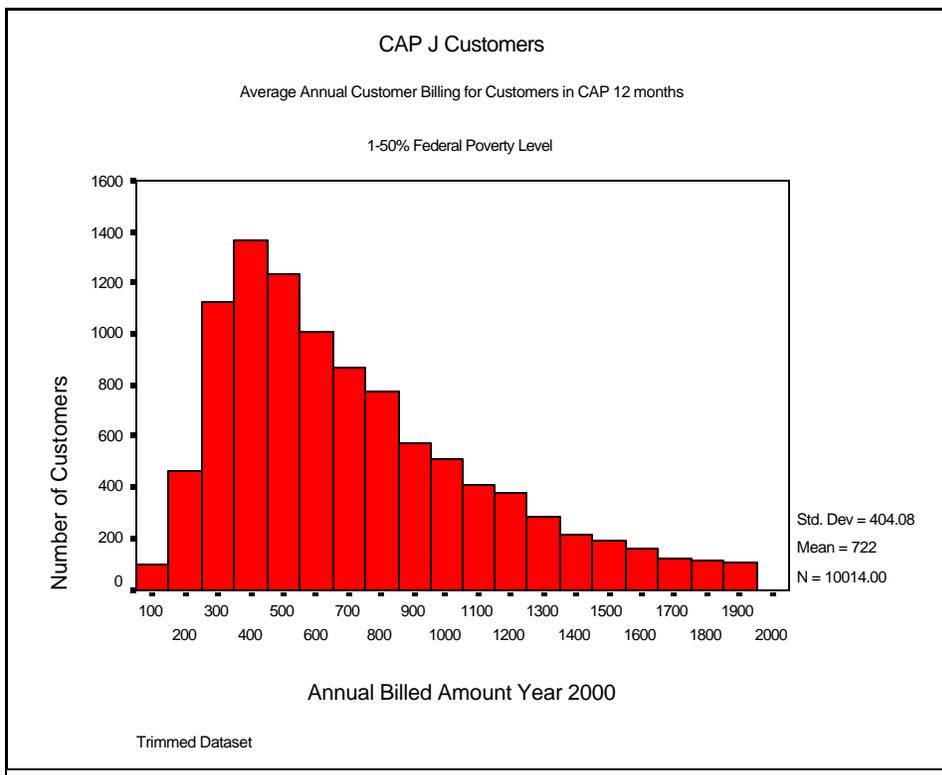


Figure VII-3: Graph on Bills for 2000 – 12 Months in Program.

The difference between the “raw” results (first row of the table in Figure VIII-3) and the trimmed results (second row) is major. Note that the mean for the raw data is about \$926 and the standard deviation is about \$1820. For the trimmed data, the mean is about \$722 and the standard deviation is about \$404. Because the trimmed data is a more accurate reflection of the customers in this group, only trimmed data is used for the analysis of billing and payment in this section of the study.

CAP J Billed Amounts 1 – 50% Poverty By Poverty Ranges Trimmed Data Set						
Billed	N	Minimum	Maximum	Sum	Mean	Std. Deviation
All	10014	63.51	1958.93	7,229,649.75	721.95	404.08
1 - 20% Poverty	964	67.85	1939.84	740,501.65	768.15	422.11
21 - 30% Poverty	2757	63.92	1958.93	1,871,227.13	678.72	392.19
31 - 40% Poverty	3971	73.42	1951.20	2,828,623.94	712.32	394.57
41 - 50% Poverty	2322	63.51	1946.55	1,789,297.03	770.58	419.42

Figure VII-5: Billed Amounts by Poverty Subgroup – 12 Months in Program.

Total Customer Payments are computed using three categories of Offsets as follows: Payments + Returned Check Amounts + Payments Generated from Cancels.

CAP J Customer Payments 1 – 50% Poverty By Poverty Ranges Trimmed Data Set							
Customer Payments	N	Number making 0 payments	Min	Max	Sum	Mean	Std. Deviation
All	10014	579	.00	3989.73	5,084,918.72	507.78	380.28
1 - 20% Poverty	964	65	.00	2277.97	508,963.66	527.97	397.76
21 - 30% Poverty	2757	220	.00	2867.88	1,264,076.46	458.49	365.50
31 - 40% Poverty	3971	242	.00	3989.73	1,934,214.53	487.08	371.32
41 - 50% Poverty	2322	52	.00	3428.15	1,377,664.07	593.31	390.70

Figure VII-6: Paid Amounts by Poverty Subgroups - 12 Months in Program.

Trimmed data results (including customers who did not make payments during 2000) are reported in Figures VII-5 through VII-7. Overall, customers paid 70% of the amount they were asked to pay. The top income category (41-50% of poverty) paid the highest percentage of the amount billed, 77%. All other categories paid from 67.5% to about 69%, showing a pattern of small differences which are not substantively significant. If the raw data had been analyzed, instead of the trimmed data, the percent paid results would have been 57% overall, and then 56%, 52%, 57% and 64% for rows 2-5 of the table in Figure VII-7. The difference between each trimmed result its corresponding raw result is due to the elimination of the 579 cases classed as high-end outliers from the trimmed data. These outliers are being billed on Rate J but are sufficiently unreasonable that they should be investigated by Universal Service. In the current analysis, we simply eliminate them by using the trimmed data.

CAP J Mean Billing & Customer Payments 1 – 50% Poverty By Poverty Ranges Trimmed Data Set					
Customer Payments	N	Mean Billing	Mean Payment	Net Difference	Percent Paid
All	10014	721.95	507.78	214.17	70.33%
1 - 20% Poverty	964	768.15	527.97	240.18	68.73%
21 - 30% Poverty	2757	678.72	458.49	220.23	67.55%
31 - 40% Poverty	3971	712.32	487.08	225.24	68.38%
41 - 50% Poverty	2322	770.58	593.31	177.27	77.00%

Figure VII-7: Net Difference by Poverty Subgroups - 12 Months in Program.

B. Electric Customers Only

The electric only subset (9,937) consists of almost all of the trimmed data customers analyzed (10,014). Figures VII-8 through VII-11 show payments, bills, cancelled bills, and energy usage for the electric only subset.

CAP J Customer Payments 12 Months in CAP J in 2000 Electric Customers Only 1 – 50% Poverty Trimmed Data Set						
Poverty Level	N	Minimum	Maximum	Sum	Mean	Avg. Number Payments
All	9937	.00	3989.73	5,029,849.05	506.17	9.2
1 - 20% Poverty	951	.00	2277.97	501,917.02	527.77	8.6
21 - 30% Poverty	2740	.00	2867.88	1,256,683.64	458.64	8.9
31 - 40% Poverty	3946	.00	3989.73	1,916,179.87	485.60	8.8
41 - 50% Poverty	2300	.00	3428.15	1,355,068.52	589.16	10.4

Figure VII-8: Electric Only Subset - Mean Payments & Number of Payments

CAP J Customer Billed Amounts 12 Months in CAP J in 2000 Electric Customers Only 1 – 50% Poverty Trimmed Data Set					
Billed	N	Sum Billed Amount	Mean Billed Amount	Average Number Bills	Average Percent of Billed Paid
All	9937	7,148,603.01	719.39	15.3	70.36%
1 - 20% Poverty	951	727,457.66	764.93	15.5	69.00%
21 - 30% Poverty	2740	1,857,105.98	677.77	15.1	67.67%
31 - 40% Poverty	3946	2,800,768.74	709.77	15.4	68.42%
41 - 50% Poverty	2300	1,763,270.63	766.63	15.2	76.85%

Figure VII-9: Electric Only Subset: Average Billed Amount & Percent Paid

CAP J Customer Cancelled Bills 12 Months in CAP J in 2000 Electric Customers Only 1 – 50% Poverty Trimmed Data Set						
Poverty Level	N	Total Amount of Cancelled Bills	Number customers receiving Cancelled Bill	Total Number of Cancelled Bills	Average number Cancelled Bills	Average amount of Cancelled Bills
All	9937	227,940.75	1350	1478	1.46	168.85
1 - 20% Poverty	951	20,714.83	121	132	1.38	171.19
21 - 30% Poverty	2740	64,030.48	401	433	1.46	159.677
31 - 40% Poverty	3946	87,531.37	527	579	1.47	166.093
41 - 50% Poverty	2300	55,664.0	301	334	1.46	184.93

Figure VII-10: Electric Subset Only: Cancelled Bills

CAP J Electricity Usage 12 Months in CAP J in 2000 Electric Customers Only 1 – 50% Poverty Trimmed Data Set						
Poverty Level	N	Minimum	Maximum	Sum kWh	Mean	Std. Deviation
All	9929	1	33673	69,410,466	6990.68	3391.11
1 - 20% Poverty	950	162	26619	6,938,189	7303.36	3458.95
21 - 30% Poverty	2738	1	33673	18,158,034	6631.86	3383.75
31 - 40% Poverty	3943	26	29324	27,477,213	6968.61	3383.27
41 - 50% Poverty	2298	2	27871	16,837,030	7326.82	3341.46

Figure VII-11: Electricity Use by Poverty Level

C. Customers Making Zero Payments

Figure VII-12 shows there are customers who made no payments during the year 2000. Of those making zero payments, some received LIHEAP assistance but not everyone received LIHEAP. Most had other types of adjustments to their account. This does not necessarily indicate a credit on the account. Figure VII-13 shows the amount of LIHEAP assistance received by CAP participants making no out-of-pocket payments.

CAP J Mean Billing & Customer Account Adjustments Plus LIHEAP Customers making Zero Payments 12 Months in CAP J in 2000 Electric Customers Only 1 – 50% Poverty By Poverty Ranges Trimmed Data Set					
Poverty Level	N	Mean Billing	Mean LIHEAP & Adjustments to Account	Net Difference	Percent Bill Coverage
All	573	656.3694	153.02	503.35	23.31%
1 - 20% Poverty	64	705.9347	201.04	504.89	28.48%
21 - 30% Poverty	215	638.4709	200.34	438.13	31.38%
31 - 40% Poverty	240	663.7691	119.27	544.50	17.97%
41 - 50% Poverty	51	634.4514	73.91	560.54	11.65%

Figure VII-12: CAP J Electric Only - Making No Payments

D. Budget Billing and Special Agreements

CAP participants can pay the CAP J or CAP K rate and also make payments according to a Budget Billing plan. Budget Bills are computed by averaging the prior 12 months of bills. The amount of the Budget Bill is recomputed every quarter and adjusted if needed. The customer on Budget Billing receives a bill for the averaged bill amount and can expect more stable and predictable billing. Customers must request Budget Billing. Some PECO customer representatives will suggest to customers that they agree to a Budget Billing plan to help them control billing and payments.

In addition to the bills customers receive for current usage, customers can also be paying on past due amounts through a Special Agreement. The average amount of a Special Agreement is \$15 per month. The original amount of these Special Agreements averages \$642 and the amounts range from a few dollars to \$30,000 according to PECO data (when outliers are not removed).

Figure VII-14 shows the number of customers in the subset of those on CAP J all 12 months of 2000. Fifty one percent of the subset were on both CAP and paying a Special Agreement at some time. Forty percent were on CAP only. (For the table in this figure, the full set of data was used, not the trimmed data.)

AP J Budget Billing and Special Agreements 12 Months in CAP J in 2000 1 – 50% Poverty By Poverty Ranges					
	CAP only	CAP and Budget Bill	CAP and Special Agreement	CAP and Special Agreement & Budget Bill	Total
All	4021	243	5416	919	10,599
Percent of Total	37.9%	2.3%	51.1%	8.7%	100.0%
1 - 20% Poverty	318	17	581	96	1012
21 - 30% Poverty	1096	66	1490	262	2914
31 - 40% Poverty	1573	94	2176	355	4198
41 - 50% Poverty	1034	66	1169	206	2475

Figure VII-13: Budget Billing and Special Agreements

The box plots in Figure VII-14 are grouped by billing status, that is, CAP only, CAP plus Budget Bill (CAP & BB), CAP plus Special Agreement (CAP & SA), and CAP plus Budget plus Special Agreement (CAP & SA & BB). Data for the box plots was taken from trimmed data. The trimmed data set removes cases with negative annual billing, and billing above the statistically identified outlier of \$1959. Box plots are summary plots based on the median, quartiles, and extreme values. The box represents the interquartile range that contains 50% of the values. The whiskers are lines that extend from the box to the highest and lowest values, excluding outliers. The line across the box indicates the median. The circles above the top whisker show the outliers. Figure VII-14 shows that those on Special Agreements are billed more than those not on Special Agreements, as would be expected. It also shows those with CAP and Budget Billing are billed more than CAP only. It may be assumed that those with Budget Billing are on Budget Billing because their bills are higher.

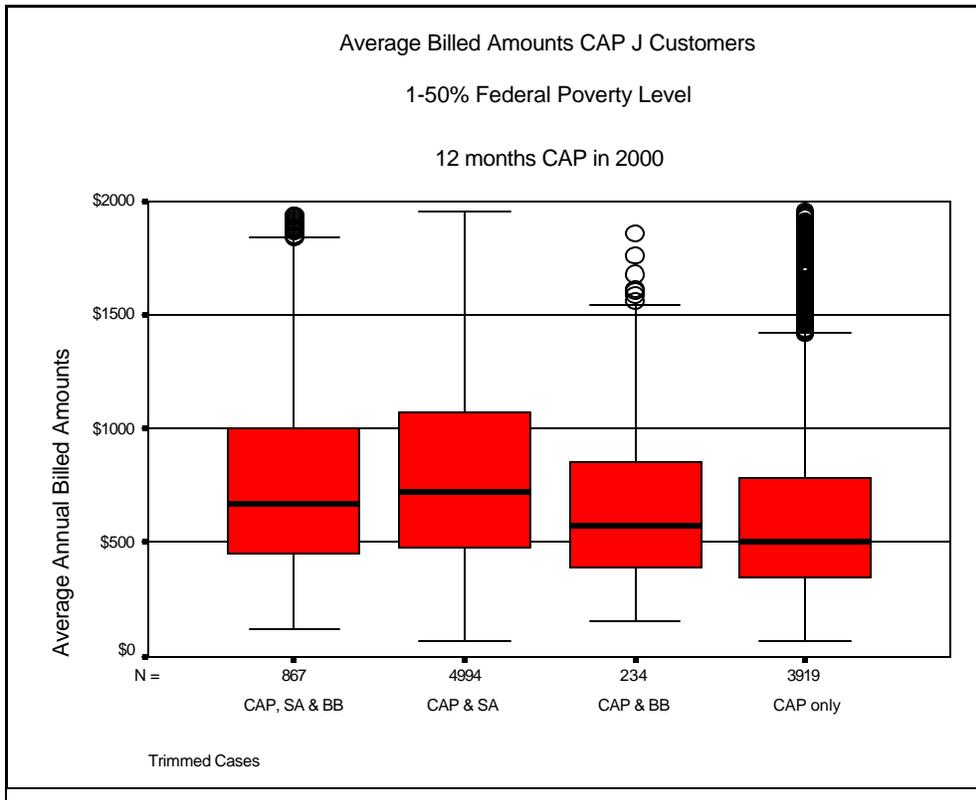


Figure VII-14: Boxplots of Budget Billing and Special Agreements

E. LIHEAP Cash and Crisis Grants

Figures VII-15 through VII-17 show the amount of LIHEAP Cash and CRISIS grants received by the trimmed subset of CAP J customers from 1-50% of poverty who participated 12 months during 2000. These grants are applied against the amount billed and are shown together with customer payments in Figure VII-17. The means shown in these tables are not the means of customers receiving grants but the means over all customers in each poverty category (over those who received grants and those who did not).

CAP J LIHEAP Cash Grants 12 Months in CAP J in 2000 1 – 50% Poverty Trimmed Data Set							
Poverty Level	Total N	N with LIHEAP	Minimum	Maximum	Sum	Mean	Std. Deviation
LIHEAP Cash	10014	1630 (16%)	.00	1585.00	523,539.39	52.28	149.01
1 - 20% Poverty	964	168 (17%)	.00	1462.00	56,129.23	58.23	167.97
21 - 30% Poverty	2757	468 (17%)	.00	1454.00	182,172.56	66.07	180.52
31 - 40% Poverty	3971	628 (16%)	.00	1585.00	194,665.79	49.02	138.27
41 - 50% Poverty	2322	366 (16%)	.00	887.00	90,571.81	39.00	110.68

Figure VII-15: LIHEAP Cash by Poverty Subgroups - 12 Months in Program.

CAP J LIHEAP Crisis Grants 12 Months in CAP J in 2000 1 – 50% Poverty Trimmed Data Set							
Poverty Level	Total N	N with LIHEAP	Minimum	Maximum	Sum	Mean	Std. Deviation
LIHEAP Crisis	10014	177 (1.7%)	.00	700.00	51,769.03	5.17	39.33
1 - 20% Poverty	964	23 (2%)	.00	400.00	6,850.00	7.11	45.76
21 - 30% Poverty	2757	51 (1.8%)	.00	345.00	14,629.03	5.31	39.11
31 - 40% Poverty	3971	67 (1.7%)	.00	700.00	20,407.00	5.14	40.24
41 - 50% Poverty	2322	36 (1.5%)	.00	433.00	9,883.00	4.26	34.89

Figure VII-16: LIHEAP Crisis by Poverty Subgroups - 12 Months in Program.

Figure VII-17 shows that customer out-of-pocket payment plus LIHEAP cover, on average, about 82% of customer bills in this particular subset of people who were paying CAP J rates all 12 months in the year 2000 (the trimmed data).

CAP J Mean Billing & Customer Payments with LIHEAP Grants 12 Months in CAP J in 2000 1 – 50% Poverty By Poverty Ranges Trimmed Data Set					
Customer Payments	N	Mean Billing	Mean Payment & LIHEAP	Net Difference	Percent Paid
All	10014	721.95	590.11	131.84	81.74%
1 - 20% Poverty	964	768.15	593.30	174.85	77.24%
21 - 30% Poverty	2757	678.72	529.87	148.85	78.07%
31 - 40% Poverty	3971	712.32	541.24	171.08	75.98%
41 - 50% Poverty	2322	770.58	636.57	134.01	82.61%

Figure VII-17: Billing, LIHEAP and Customer Payments – Percent of Bill Paid

F. Computing the Billed or “Please Pay” Amount

PECO provided data for this analysis in component parts for revenue (billing) and offset (payment) types. Since customer payments are clearly labeled in the offset data that PECO provided, payments can be tracked from the evaluation database. Information necessary to generate customer bills was partially provided. For this reason, data has been analyzed for a calendar year. To compute the “Please Pay” amount by billing cycle, it is necessary to build a utility billing system to use the data in the form provided by PECO for the evaluation database. The billing records provided for the evaluation database include revenue generated by six bill types. Revenue is the amount that PECO expects to be recover (be paid) if the customer is not on a Budget Billing plan (equal pay with quarterly true up) or on a Special Agreement (to pay down past due amounts). The revenue total also includes all late fees, service fees to “turn on” service, and return check charges. The data is distributed across fields that detail generation, transmission, taxes, and the like. The revenue total does not include any arrearage.

To determine the amount the customer is asked to pay each month, it is also necessary to apply the offsets, that is, the adjustments to the revenue generated. Offsets can include things like cancelled bill amounts, cancelled late charges, revenue adjustments, LIHEAP and customer payments. Not all offset types are applied against the current generated revenue to determine the “Please Pay” amount. For example, the “CAP2 charge off” field is the pre-program arrearage forgiveness, and is applied

against the pre-program arrearage, not the current bill due. To determine the amount billed, all the billing business rules and algorithms (payment priorities) must be supplied and programmed. If the customer has a past due amount (arrearage) the “Please Pay” amount will also include the past due amount. Layered on top of this are the Budget Billing and Special Agreement arrangements. If the customer is on a Budget bill, they are not asked to pay the Revenue total, but the Budget bill amount. If they are also on a Special Agreement, that amount is added on top of either the Budget bill amount or the Revenue total.

Customers had between 1 and 39 entries for Revenue during the year 2000. Some of these are “No Bill” situations; others are Standard bills or “Straggler” bills (where one bill is cancelled and followed by a new billing). Other revenue entries record amounts forwarded from a previous address and Final bills. Customers had between 1 and 181 offset entries in the year 2000. Each of these entries must be applied to the correct billing cycle as there can be many more than one offset to the customer’s account in any given month.

PECO did not provide the past due amount each month. It is necessary to compute it by applying the offsets against revenue. Because no starting value for past due amount was provided, a default starting value of zero must be applied. In some cases an actual zero may be applied: when customer enters CAP and current past due is moved to “frozen” pre-program arrearage which zeros the current past due amount. For most cases a zero simply has to be assumed at this point, so actual values are not correct but delta values should be stable.

For the analysis in this section of the study, a utility billing system was partially developed to approximate the monthly “please pay” amount, the past due, and to determine whether the customer made payments prior to the issue of the next bill. To apply all offsets to revenue in the appropriate billing cycle, the dates of the billing cycle for each customer must be known. Since more than one offset event can occur during a billing cycle, including bill cancellation and rebilling, the time between one Revenue event and the next is not always the billing cycle. Additional information is needed to compute the payment behavior detail. This includes identification of the digits in the account number that identify the billing cycle and the table of dates of the billing cycles for each month being analyzed.

G. Attrition

The attrition for the verifiable CAP J, 1-50% of Poverty group appears stable, with participation growing over time. Yet there is heavy attrition in the 0-50% of Poverty group as shown in Figure VII-18. The heavy attrition is from customers assigned to zero poverty, a code used by PECO for customers for whom poverty data is not known.

Participation 1-50% Poverty Range Calendar Year 2000					
Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6
Month	Enter CAP	Continue CAP	Total in 1-50% CAP	Leave CAP Leave PECO service	Leave CAP Return to Standard rate
Jan	413	12399	12812	1	82
Feb	484	12703	13187	0	109
Mar	532	13017	13549	62	108
Apr	533	13470	14003	1	78
May	624	13820	14444	1	182
Jun	501	14230	14731	1	213
Jul	592	14703	15295	4	24
Aug	600	15272	15872	7	16
Sep	755	15822	16577	9	41
Oct	668	16327	16995	5	245
Nov	553	16644	17197	8	343
Dec	680	16867	17547	6	324
Note: In column 5, participants leaving CAP service can mean that the customer left the service territory altogether. It can also mean that the customer terminated service with one service account number and did not leave the service territory, rather, came back to PECO service with another account number. If the same customer returns to PECO service with a new account number and re-enters CAP, Column 2 will not be counting entirely new and unique CAP participants.					

Figure VII-18: Attrition from Verified CAP J, 1-50% of Poverty.

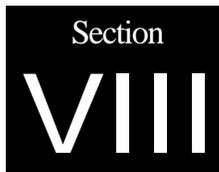
PECO CAP & Confirmed Low-Income Households, 2000					
Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6
Month	Income Block			Total CAP	Confirmed Low-Income
	0-50%	51-100%	101-150%		
Jan	43,130	26,068	12,752	81,950	190,471
Feb	43,035	26,385	12,965	82,385	190,441
Mar	42,738	27,077	13,224	83,039	190,657
Apr	42,287	27,700	13,525	83,512	193,412
May	41,591	27,978	13,626	83,195	193,781
Jun	40,915	29,805	14,558	85,278	193,570
Jul	40,531	30,287	14,777	85,595	192,721
Aug	39,791	31,186	15,205	86,182	193,708
Sep	39,108	31,943	15,562	86,613	193,052
Oct	34,250	34,273	16,364	84,887	193,730
Nov	33,487	33,667	16,016	83,170	190,995
Dec	32,770	33,524	15,911	82,205	193,664
Average	39,469	29,991	14,540	84,001	192,517
Source: PECO Universal Services Reporting Requirements, Input Document, December 13, 2001.					

Figure VII-19: Filed Attrition (Column 2).

H. Summary

Billing and payment data have been analyzed only at the annual level due to data problems that are expected to be resolved prior to the final Evaluation report covering the full program evaluation. For customers who remain in the program for a full 12 months (trimmed data set) the bill coverage from customer payments averages 70% (Figure VII-7). The attrition information is mixed – the verifiable cases show a good pattern, the cases administratively coded to 0% poverty due to missing poverty data show high attrition.

The payment rate for the customers who stayed in CAP Rate all year was about 70% without considering LIHEAP. When LIHEAP is included, the payment rate for these customers for calendar year 2000 was about 82%. These results indicate an affordability problem for the “best” customers (those who stay in the program for the full year) in the range of 1-50% of poverty.

The logo for Section VIII, featuring the word "Section" in a small font above the Roman numeral "VIII" in a large, bold font, all contained within a black square.

Section
VIII

CARES

VII. CARES FOR THE CUSTOMERS

A. A Brief History of CARES

Historically, special payment programs for “payment-troubled” customers sprung from a changing economy in Pennsylvania in the mid to late 1980’s. The demise of the manufacturing and steel industry gave rise to the “new poor”, a term used to characterize former middle class working men and women who were thrown into a regional economy which offered little but minimum wage jobs and welfare assistance. Customers who were historically “good-payers” began to experience mounting utility arrearages and terminations, severe income deficits when compared to basic monthly living expenses, mortgage foreclosures, automobile repossession, family disruption and increased emotional stress and depression.

It was out of this great regional, economic need that CARES programs emerged. The Pennsylvania Public Utility Commission took a proactive position in “strong advisement” directives to regulated utilities, particular to CARES and its implementation. Utility CARES programs are an indication of increased awareness of the needs of the new poor, the under-employed, the low-skilled minimum wage worker, the new waves of downsized and surplus employees, and seniors and disabled persons on fixed incomes. CARES programs have traditionally responded to the needs of a changing community with customers experiencing hardship in difficult economic times.

Early CARES programs varied in the way in which utilities designed and implemented this service. Some utilities were in the unique position to hire and use the services of professional social workers, and entire utility “in-house” CARES departments were created. Other utilities contracted with traditional Community Based Organizations (CBOs) that offered the services of case-managers who made referrals to customers in a “total case management” approach. But a strong thread that wove itself throughout the program design was that the PA PUC “strongly endorsed” the guidelines that these services “should not be done by company employees who perform responsibilities related to billing, credit or collections.”²⁹ In other words, the CARES programs are to stand apart from traditional credit and collections and instead be administered by social service personnel within the utility or contracted (out-sourced) to the community advocacy sector.

²⁹ PA PUC Secretarial Letter M-840403, John G. Alford, May 31, 1985.

Utilities have had the autonomy to structure a CARES program that may or may not decrease monthly payments for customers who cannot pay the full amount of their utility bill. CARES services may include a home visit, although not necessary or effective in all cases,³⁰ a “customer-friendly walk-thru” energy audit, energy education, budget counseling, energy assistance and fuel hardship fund grants, and referrals to social service agencies that are specific to the customers’ needs or that provide “leverage” sources for bill payment.

B. Pennsylvania’s Policy Advisement on CARES Programs

CARES programs have historically been categorized under the “policy umbrella” of “strong advisement” with much flexibility in design, rather than the stricter interpretation of the Pennsylvania Code, Title 52, which mandates Universal Service Programs. However, the Universal Services Policy Statements since utility restructuring include the implementation of CARES programs. Under Title 52, §62.1(A), Statement of purpose and policy, “mandate that the Commission ensure Universal Service and energy conservation policies, activities and services...”³¹ of which CARES is included. In the same Subchapter A, the definition of CARES is as follows:³²

CARES:

Customer Assistance and Referral Evaluation Services —
A Program that provides a cost-effective service that helps selected, payment-troubled customers maximize their ability to pay utility bills.
A CARES program provides a casework approach to help customers secure energy assistance funds and other needed services

Specific Universal Service plans, including CARES, are to be submitted to the Commission for approval by each NGDC every 3 years beginning in February 28, 2002.³³

³⁰ Janice Hummel, PA PUC, BCS, paraphrase from quote of August 22, 2001.

³¹ PA PUC § 52 Code, Chapter 62. Natural Gas Supply Customer Choice, Subchapter A. Universal Service and Energy Conservation Reporting Requirements, §52.62.1, Statement of purpose policy.

³² Ibid., §52.62.2. Definitions.

³³ Ibid., §52.62.4, (b), (1)-(11) Universal service and energy conservation plans, and §52.62.5, Annual residential collection and Universal Service and energy conservation program reporting requirements.

The Commission released four recommendations in a Secretarial Letter dated November 30, 1992 that provide guidelines for a CARES program. The Commission recommends the following guidelines for a CARES program:

- Utilities should continue to operate and develop their CARES programs as recommended.
- Utilities should communicate annually with the BCS on the status of their CARES program.
- Utilities which currently require senior citizen status to be eligible for CARES should expand eligibility criteria so as to include special needs low-income payment troubled customers who have extenuating circumstances.
- Utilities should include, *inter alia*, the following seven elements in a CARES program:
 - Staff training in communication skills.
 - Staff training regarding the program design of CARES.
 - Home visitation, one at a minimum, and preparation of an energy audit in most cases for CARES recipients.
 - Intensive tracking and referral services for CARES participants.
 - Maintenance of confidential files for CARES participants.
 - Expansion and maintenance of the customer service network.
 - Inclusion as one of the job description criteria for a CARES representative, a social services background or a combination of experiences and education that includes listening and communication skills and a compassionate and caring attitude towards the needs of the low-income utility customers.³⁴

C. Current PECO CARES

The PECO Customer Assistance Referral Evaluation Services Program (CARES) is described in PECO's Universal Services Three Year Plan 2001-2003³⁵, as a "referral and information service designed to assist customers who have a temporary personal or financial hardship that prevent the

³⁴ Authority for CARES resides at the level of a Secretarial Letter, rather than (as for other compliance requirements) in the Pennsylvania Code. PA PUC Secretarial Letter, John G. Alford, Secretary, November 30, 1992.

³⁵ Dated 8/8/2000, Prepared by Joseph R. Donaghy, Director, Accounts Receivable, Universal Services.

payment of their utility bill.” Where appropriate, PECO would provide “temporary protection from termination, specific education and referral information for energy and non-energy related assistance.” PECO’s Plan called for a strengthening of the network of community agencies to maximize available resources and an exploration of new opportunities to provide customers the CARES assistance they needed.

PECO states in the Three Year Plan that PECO, and in actuality it is the Universal Services staff, is working with several Philadelphia based community organizations (CBO) to develop an ongoing relationship to provide referral services for PECO customers. PECO has recently expanded the responsibilities of the MEAF agencies to support CARES referrals. The Three Year Plan states it will utilize six Community Based Organizations as their CARES network,

The Plan does not allocate separate funding for a CARES program. The PUC Order dated 9/28/00³⁶ determined that the revised Universal Services Plan including the CARES discussion complies with Section 54.74(b)(2).

The Three Year Plan indicates in Table 1, Eligibility Criteria³⁷ that the eligible population is not tied to income criteria. Follow-up discussions with PECO confirm the intention that a CARES program be income-blind. The target population according to the Three Year Plan includes those customers experiencing “special circumstances that require direct assistance in order to maintain safe and adequate utility service.” PECO estimates the eligible population could be 33,000. The Three Year Plan states:

The Company has analyzed the various points of interaction with its low-income residential customers and the participation levels of MEAF/LIHEAP and has determined that the potential participation level for the CARES component of Universal Services is 33,000.

This estimate is likely to be conservative. As evidenced in the survey of randomly selected CAP Rate participants, customers often need help but do not know whom to ask or what services are available (Section III). An income-blind CARES program could serve well over 33,000 customer households.

In the CARES section of PECO’s first submission of the Universal Services Reporting Requirements to the PUC for the year 2000, PECO reports no expended CARES program costs and no information regarding CARES family size or income. Subsequent questions 64 and 65 report that 25,554 customers were both referred to CARES and accepted into CARES. Observations at PECO and the call centers, as well as discussions with PECO Universal Services staff confirm there is not a CARES ‘program’ per se. The 25,554 customers were likely to have received a referral for

³⁶ Docket No. M-00001418.

³⁷ Three Year Plan, Page 20. 8/8/2000.

services from a call center representative.³⁸ This may be a referral to a community organization that could assist the customer, or something else. However, these people did not receive in-depth or follow-up services, or the assistance of a CARES representative who could ensure the customer obtained the help they needed. PECO does not dedicate the necessary staff or the budget for this type of CARES program.

In actuality, PECO's CARES program consists of voluntary actions on the part of concerned individuals (employees and outsourced subcontractor personnel) who are severely stressed by time constraints and other duties. The PECO call center representative may take an extra step to report a customer with critical or special needs to his/her supervisor. The supervisor may follow up personally, choosing either to call the customer themselves, do nothing more, or refer the customer to a Universal Services staff person. That Universal Services staff person may review the customer account and instruct the call center supervisor on a course of action. CARES referrals of this nature are very few, with less than two dozen reaching the attention of Universal Services staff over the course of a year.

PECO Universal Services staff have stated the Universal Service budget does not include funding for staff to train the call center representatives to provide comprehensive referral services consistent with the CARES program outlined in the Three Year Plan.

D. Toward an Effective CARES Program

The Evaluation Team recommends that PECO strengthen its Customer Assistance Referral and Evaluation Services (CARES) component of Universal Service program to provide clear designation and accountability for these services. To make any sense whatsoever, this means allocating dedicated staff for CARES and a CARES budget. The Evaluation Team also recommends PECO Universal Service to provide staffing assignments and training for these services.

The September 2000 PUC Order summarizes the changes in PECO CARES programs over the last ten years. It reports that in 1990, PECO employed 10 full-time CARES representatives and targeted customers over 62 years of age. In 1993, that program was eliminated. In 1997, PECO "implemented a CARES program that appeared to meet the Commission's guidelines."³⁹

Although the Company has stated its intention to develop a CARES program, and has made an approach at taking the first steps to involve six CBOs in referring services to customers, we believe the Company can and should do more.

³⁸ There is currently no CARES indicative in the customer's utility record. There are no indicatives in the account level record specifying referrals and the nature of the referral. The call centers track some types of referrals in aggregate reports to PECO. The entire current CARES effort is essentially a virtual assertion without resources (dedicated staff and budget), meaningful tracking and reporting, and control tools.

³⁹ Docket No. M-00001418, page 18.

The following descriptions of CARES programs present four levels of effort. PECO customer service call center representatives currently provide referrals to various agencies, in a level of effort termed below as “Quick Fix”. This level of effort is currently provided inconsistently, but could be provided to all customers who indicate the need for assistance during their interactions with PECO. The Evaluation Team recommends that PECO move immediately toward incorporating the “Intermediate Case Management Approach” into the Universal Service CARES component. This includes designating a CARES representative assigned to provide personal case management. The Evaluation Team further recommends designing a CARES program that includes all three levels of effort described below. All three levels of effort include the “Quick-Fix Approach,” the “Intermediate Case Management Approach,” and the “In-depth Case Management Approach.” A comprehensive CARES program depends on establishing the capability to provide all three levels. The fourth level of effort establishes regular coordination between PECO and other area businesses and agencies.

E. The “Quick-Fix” Approach

A “quick-fix” is accomplished by the customer service representative while on the phone or talking with the customer in person at the CBO offices. The success of this approach depends on adequate training and comprehensive understanding of the available energy assistance programs and social service referrals that exist. It is vital that the PECO representatives have the skills to match the customer’s need with the correct referral. Generally, the “Quick-Fix” requires minimal on-going support of CARES representatives. It will require call representatives attuned to the customer’s needs and a direction of effort toward providing appropriate referral services.

F. The Intermediate Case-Manager Approach

The intermediate approach requires initial and follow-up supportive phone calls by a designated CARES representative or case-manager. The customer demonstrates that he/she can clearly and easily follow-through with energy assistance and other recommended social service referrals without the need of a caseworker physically present in the home. Periodic phone contact is maintained to give encouragement and address issues as they are presented. Other agencies and supportive services can be called in to access the home as needed. The CARES representative should actively communicate with and coordinate services with outside agencies, such as Area Office on Aging Services, Home-Health Care, Meals on Wheels, etc., to offer the customer comprehensive referrals and assistance.

G. The In-Depth Case-Manager Approach

The in-depth approach gives homebound, critically ill customers, frail seniors or those with limited mental ability, the support and needed observation required by a home visit. A CARES representative or case-manager conducts the home visit. The home visit should include (but not be limited to) providing the following:

-
- Budget counseling
 - Case-management assessment
 - Energy education and referral to weatherization
 - Referrals to Energy Assistance and Hardship Funds
 - Referrals to appropriate social service agencies
 - Follow-up education and print materials that clearly explain PECO objectives, expectations and lists contact phone numbers.
 - Periodic phone contact and monitoring of payment history and referral follow-through, with additional home visits as needed.

H. Community Coordination

Knowledge of information other agencies provide, let alone the coordination of services between agencies, can be a difficult task if no focused and purposeful attention is given. The Evaluation Team recommends that PECO spearhead the organization or foster the development of a group of people representing utilities, government, private non-profit, and other groups that provide services to low-income and at-risk people in and around Philadelphia and surrounding counties. The purpose of the organization would be to form effective and efficient working relationships between agencies that provide services to the same population. This group would ensure a link between agencies and should be the conduit for the continued involvement of other agencies that provide supportive services and home care. These agencies would include, for example, Office on Aging, Meals on Wheels, Visiting Nurses Assoc., Senior and Disabled Services, the Energy Coordinating Agency, a PGW CRP representatives, Water Revenue Bureau, Consumer Credit Counseling, various religious groups and City and State representatives working with relevant programs. Sharing information about the services provided, as well as specific customer referrals, could enhance the functionality of all community resources focused on this population. Establishing common income eligibility requirements and a means to accept other agency's income qualification of a client can reduce administrative time and costs, and allow agencies to serve more people. Multiple applications and program requirements unique to each agency can present barriers to potential participants. Removing these barriers better serves this population.⁴⁰

⁴⁰ Based in Eugene Oregon, the Lane County *Community Resource Network* involves over 35 agencies providing services to the low-income population. This group provides a model of diverse agencies coordinating their efforts toward providing better service to all of Lane County's residents.

I. Coordination and Training

It is crucial that thorough training and education regarding the CARES program be provided to all customer service representatives, district office representatives, meter readers, field personnel contractors who access customer's homes, and other out-sourced contractors. This training should include communication and sensitivity skills, observational skills and CARES program design, implementation and objectives. It is appropriate for the CARES training to include information about PECO's own programs, including CAP and LIURP.

An effective CARES program depends on the sensitivity of trained representatives who can discern the difference between a phone call that involves supportive empathy and a quick referral, and one that requires more comprehensive involvement from a CARES caseworker with on-going personal contact.

PECO should be proactive in forming new partnerships and strengthening existing partnerships with community agencies. This includes on-going communication, providing basic information about CARES, and promoting CARES (along with CAP) to community-based organizations, social service providers, aging services, government groups and faith-based organizations. In addition to contact with social service agencies, the CARES program can be promoted to customers through outreach in bill inserts, by utility phone "on-hold" messages and within the CAP script that phone representatives use.

J. CARES Reporting Requirements

In addition to the PUC Universal Services Reporting Requirements, the PUC "Recommended Content of Annual CARES Report" includes a format for reporting more in-depth information about CARES. The "Recommended Content" outlines reporting formats for demographic data about the household size, income, reasons for enrollment, and criteria that resulted in CARES eligibility. Reporting includes the number and types of referrals, both energy and non-energy related. Regardless of the CARES level of effort finally implemented by PECO, PECO will need to make some revision to its customer database to track referrals categorized as CARES as well as any other CARES activities. A CARES indicative will need to be added to the system, and the representatives will need to activate the indicative during the phone call. CARES referrals made manually by CBO representatives will require tracking and reporting on a customer account level basis so that information can be input into the PECO computer system. This will be necessary to complete the PUC CARES Report. It is also a valuable management tool.

K. Staffing

For a CARES program to be effective and successful, it is essential to utilize the coordination efforts of a designated CARES manager or representative. One such person should be hired or identified within PECO's Universal Service structure as the CARES manager. This person may or may not also be a designated CARES case manager. PECO should employ a minimum of ten CARES case managers. These people should be licensed, skilled and practiced social workers. Ten case managers on staff would be the same number employed in 1990 to service just those customers over 62.

We find that the current CARES effort is a virtual effort, not a material program. Without experienced social workers (BSW/MSW), either on staff or through arrangement with the City and/or CBOs, PECO is not capable of providing the necessary service.

L. Filling the Payment Gap

When the customer finds that the minimum bill is still too high for them to afford to pay within their existing income, it is the role of CARES to assist the customer. CARES should help the customers fill the gap between what can be paid and the minimum bill. CARES should provide the referrals and follow-through with the customer to ensure that they have obtained the help needed. Community Coordination (discussed in Section D.4 above) is essential here as well. Reducing the barriers the customer faces will smooth the process for both customer and agency.

Section
IX

Overview of the 0-50% FPL Population

IX. PROFILE AND EXPERIENCES OF THE 0-50% FPL STUDY SET

This Section provides an overview of the experiences of the households included in the 0-50% FPL Study Set. These households represent the larger population in PECO’s service territory and are the building blocks of the Reichmuth Sector Map.

A. Demographics

For the 13,524 CAP customers included in the 1-50% FPL Study Set used to develop the Sector Maps, the number of persons in the household was recorded for 13,402 households. These households average 3.55 persons in size, with the range between one person and 14 person households. These households include a total of 47,628 persons.

Income data was recorded for all customers in the Study Set. However, 1175 customers have zero income recorded. For some customers, zero income can be legitimate. For others, the zero may be a placeholder and does not mean that the household receives zero income. Of those reporting income other than zero, 12,349 customers reported income ranging from \$1 per month to \$1473 per month. For this subset, income averaged \$432.71 per month for the average 3.55 person household.

Poverty level data was recorded for all 13,425 households. Poverty levels ranged from 0% FPL to 50% (our Study Set) and averaged 30.63 FPL.

Demographics for 0-50% FPL Study Set

	Number in household	Income per month	Percent of Poverty
Mean	3.55	395.11	30.63
Count	13524	13524	13524

Figure IX-1: Demographics of Study Set

B. Terminations in a Three-Month Period

At this time PECO has provided an incomplete record of termination related data to the Evaluation Team. For the period between May 7, 2001 and August 16, 2001, this data shows that 4427 terminations were completed for 3070 customers within the larger dataset included in the overall analysis. Customers can have more than one termination. This dataset includes 200,000 customers who are participating in CAP or who are in LITS database. About 26% of the 4427 terminations were customers in the 1-50% FPL range.

Of the 13,524 CAP Rate customers included in the 1-50% FPL Study Set, 213 CAP customers received 288 terminations during a 3 month period. Most of these customers experienced one termination, but the maximum was five terminations in a three-month period. While none of the termination dates are duplicate dates, some are only a few days apart. The reason for frequent terminations needs to be explored with PECO.

Records show some customers were terminated with a credit on the account. Twenty-three customers were terminated who either had a zero balance, or had a credit on their account. The largest credit on a terminated account is \$148. One hundred eighty nine customers owed PECO \$149,188. The maximum owed by a single customer was \$11,374. The average amount owed was \$789.

Terminations between May 7, 2001 and Aug. 16, 2001 for customers in the 0-50% FPL Study Set

Count		Rate					Total customers
		RJ no gas	RJ with PECO gas	RK no gas	RK with PECO gas	RHJ no gas; RHJ with gas	
number of terminations	1	110	36	8	4	3	161
	2	20	11	1	1	2	35
	3	3	7		1	1	12
	4	2	2				4
	5	1					1
Total		136	56	9	6	6	213

Figure IX-2: Terminations in a Three Month Period

An examination of data in the REMARKS data file provides more complete information than the Terminations file prepared by PECO. REMARKS code terminations for non-payment as SONP and service restorations as REST. The following 2 tables show the number of CAP customers with and without identified Poverty levels, and the number of customers who were in CAP J for 12 months in 2000, who were shut off for non-payment and who had service restored. Nearly all CAP customers had service restored. Statistics on service termination, service restoration, and turn on fees are shown in Figures IX-3 to IX-5.

Shut Off for Non Payment 1-50% Poverty Level						
By Three Groups: CAP J for 12 months in 2000 CAP Customers with identified Poverty Level in 2000 CAP Customers with unidentified Poverty Level in 2000						
Number of shut off for non payment experienced by customer	CAP customers with identified Poverty Level		CAP customers with unidentified Poverty Level		CAP J customers for 12 months	
	N= 18,980 3% Shut off		N = 20,861 3% Shut off		N = 10,599 4% Shut off	
	Number	Percent	Number	Percent	Number	Percent
1	241	39.77%	262	39.34%	145	37.37%
2	163	26.90%	183	27.48%	104	26.80%
3	110	18.15%	119	17.87%	72	18.56%
4	42	6.93%	49	7.36%	29	7.47%
5	25	4.13%	25	3.75%	21	5.41%
6	12	1.98%	14	2.10%	7	1.80%
7	11	1.82%	11	1.65%	9	2.32%
8	2	0.33%	3	0.45%	1	0.26%
Total number customers shut off for non payment	606		666		388	

Figure IX-3: Shut Off for Non Payment.

Service Restoration 1-50% Poverty Level						
By Three Groups: CAP J for 12 months in 2000 CAP Customers with identified Poverty Level in 2000 CAP Customers with unidentified Poverty Level in 2000						
Number of restorations experienced by customer	CAP customers with identified Poverty Level		CAP customers with unidentified Poverty Level		CAP J customers for 12 months	
	N= 18,980 2.9% Restorations		N = 20,861 2.9% Restorations		N = 10,599 3.5% Restorations	
	Number	Percent	Number	Percent	Number	Percent
1	11	1.94%	12	1.92%	8	2.13%
2	488	85.92%	536	85.76%	314	83.51%
3	11	1.94%	11	1.76%	8	2.13%
4	50	8.80%	58	9.28%	41	10.90%
6	8	1.41%	8	1.28%	5	1.33%
Total number customers with restoration	568		625		376	

Figure IX-4: Service Restoration.

Customers can pay service turn-on fees of \$60 per connection. If the taps were cut during disconnection, the service turn-on fee is \$250. About 92% of those who pay turn-on fees pay them once for \$60. Those paying multiples of \$60 paid this fee for more than one restoration. Only one person paid \$250 for restoration once and only one paid the \$250 fee two times.

Service Turn on Fee 1-50% Poverty Level						
By Three Groups: CAP J for 12 months in 2000 CAP Customers with identified Poverty Level in 2000 CAP Customers with unidentified Poverty Level in 2000						
Amount of Turn-on Fees paid by customer	CAP customers with identified Poverty Level		CAP customers with unidentified Poverty Level		CAP J customers for 12 months	
	N= 18,980 2% Fees		N = 20,861 2.1% Restorations		N = 10,599 2.3% Restorations	
	Number	Percent	Number	Percent	Number	Percent
\$60	351	92.13%	419	92.90%	220	90.53%
\$120	26	6.82%	28	6.21%	20	8.23%
\$180	2	0.52%	2	0.44%	2	0.82%
\$250	1	0.26%	1	0.22%	1	0.41%
\$500	1	0.26%	1	0.22%		
Total number customers paying fees	381		451		243	

Figure IX-5 Turn On Fees.

C. Disputes

Of the 13,524 CAP Rate customers included in the 1-50% FPL Study Set, 1932 households (14%) filed a total of 2300 disputes over the period from Sept. 1998 through November 2001 (Figure IX-3).

Restricting the examination to disputes filed in the year 2000, the data shows that 664 households (5% of the Study Set) filed a total of 707 disputes, with the majority filing one dispute (Figure IX-4).

Number of Disputes Filed in 2000 by Households in the Study Set

	Study Set Number of households	Total number of disputes
Number of 1 disputes	630	630
2	27	54
3	5	15
4	2	8
Total	664	707

Figure IX-6: Disputes Filed.

Figure IX-5 shows that these 664 households were disputing a total of \$66,031 in billed charges. For 508 of the 664 disputes no dollar amount is associated with the dispute in the data records. The remaining 156 disputes included revenue ranging from \$6.21 to \$11,996.52. An examination of the data shows the maximum dispute by one household for \$11,996.52 was for an estimated bill that was too high. The dispute has been closed, with collections resumed. Only one other household filed a dispute for more than \$5000. That amount was \$11,197.69. The dispute is coded as 'current use too high' and the dispute has been closed, with collections resumed. The classification of disputes by type of dispute is shown in Figure IX-6

Revenue involved in monetary disputes filed in year 2000 by households in Study Set

	Number of cases	Minimum	Maximum	Sum	Mean	Std. Deviation
Disputed dollar amount	156	\$6.21	\$11,996.52	\$66,031.18	\$423.28	1379.51826

Figure IX-7: Disputes Filed in 2000 by Study Set Households

Type of Dispute and Dispute Resolution for Disputes filed in the year 2000 by the Study Set Households

Count	Resolution							Total
	Faxed-PUC case open faxed	Closed-PUC case closed	Closed-Dispute closed/stickered	Closed-Dispute/sticker closed	Closed-customer satisfied	Canceled	Closed-Resumed collections	
CAP							1	1
CREDIT							1	1
CURRENT ELECTRIC BILL TOO HIGH					8		5	13
CURRENT GAS BILL TOO HIGH				1	1		3	5
CURRENT USE TOO HIGH			1	4	43		70	118
EDC PAYMENT				2			17	19
ELECTRIC & GAS BILLS TOO HIGH							1	1
ELECTRIC BILLS TOO HIGH				2	2		4	8
ESTIMATED TOO HIGH				3	8		36	47
ESTIMATED TOO LOW							2	2
FORA-CONVERTED FROM REMARKS							1	1
FOREIGN WIRING/PIPING				1	1		6	8
HBCM-CONVERTED FROM REMARKS				1			13	14
INCORRECT ELECTRIC SUPLR RATE							1	1
INCORRECT ELECTRIC SUPPLIER			1	2		1	22	26
INCORRECT METER NUMBER							1	1
LPMU-CONVERTED FROM REMARKS							3	3
NEVER APPLIED FOR SERVICE			1	2				3
NEW COMPLEX CASE	5	31						36
NEW CONSUMER CASE	2	16						18
NEW FORMAL CASE		3						3
NEW PAR CASE		239						239
POSSIBLE METER MIX-UP							1	1
PREVIOUS USE TOO HIGH					3		8	11
PUC CASE - CONVERTED FROM RMKS		97						97
REQUESTS ACTUAL READING					2		17	19
SLAM CONVERTED FROM REMARKS				1			3	4
TRAC-CONVERTED FROM REMARKS				1			3	4
TURNON/SHUT OFF DATE INCORRECT							1	1
USE TOO LOW							2	2
Total	7	386	3	20	68	1	222	707

Figure IX-8: Types of Disputes

D. CAP Exits

CAP Exits, taken from the PECO reporting requirements input are show in Figure IX-7

CAP Exits		
Poverty Level	Default Exits	Percent of Participants
0% - 50%	25644	65%
51% - 100%	4122	14%
101% - 150%	2398	16%
Source: PECO Universal Services Reporting Requirements, Input Document, December 13, 2001.		

Figure IX-9: CAP Exits

Default provisions refer to CAP rules that allow a utility to start collection activity (dismiss from the CAP) for any CAP participant who fails to comply with program requirements. Default Exits (Pa. Code §54.75(2)(i)(C) and §62.5(a)(2)(i)(C) are for non-compliance with program requirements. Program requirements may include nonpayment, late payments, missed meter reads, excess consumption, lack of energy assistance and no recertification. PECO's policy is to only remove participants from CAP Rate if they are no longer income eligible or in other ways become ineligible for the CAP (for example, customers may leave the service territory).

On Economic Security

X. ECONOMIC SECURITY & NEED

With recent events⁴¹, economic security has become highlighted as a focus of both civil society and the nation. In the US President's State of the Union address in 2002, the "War on Terrorism," "Homeland Security," and "Economic Security" are the three main goals; these are touchstones against which national life will be referenced for the foreseeable future.

Of these, economic security is most relevant to examination of affordability. Economic security has twice been a critical focus in the history of the United States. Economic security was a critical social and national interest during the Great Depression, lasting from 1929 until the beginning of World War II, and in the "War on Poverty," lasting from about 1964 until the early 1970's.

E. A Different Era

A return to a focus on economic security is a strong shift in perspective. From the luxury of a focus on profit, merger, acquisition, and building market share; from the dotcom and deregulation bubbles; from the excesses of the ENRON model of deregulation scheming, from the failures of US accounting to truthfully report problems to the investing public, from the scandal of major investment houses misleading investors, we have come to the reality of hard times. Business must now focus accountability to the public and demonstrate commitment to social welfare. This will become increasingly important if the national and global economy continue to falter. The sharp shift is similar to the transition from the years of economic expansion of the late 1920's to the focus on jobs and social legislation of the 1930's. The shift is one from self-centered profit maximization to the striving for practical results in securing the continued economic viability of the people. In this shift, the outlooks and motivations of individual acquisition, profit seeking, and the marketing mentality that had seemed unquestioned such a short time ago, have become very problematic. It is

⁴¹ The attack on the World Trade Center and the Pentagon, the war effort, and the President's call for long-term war are, of course, the most visible. Also, a return to heavy deficit spending, the emergence of serious revenue gaps in state revenue, and stronger government intervention in all phases of economic and social life led by conservative interests, the onset of major economic recession, the questioning of corporate accountability due to the excesses of the deregulation era, the continuing major business cutbacks, mergers and downsizings, withdrawal of services, the strong deflationary trend in the economy, and other perceived problems of the business system.

not a matter of rejecting acquisition, profit seeking, or marketing, but that these perspectives are now edited by the need for higher and wider social outlooks for collective security, including economic security.

In the great depression, the social welfare implications and social accountability considerations of potential policies and actions necessarily took precedence over other business objectives. The shift was driven by the practical necessities of a changed economy, the need to keep social peace, and the need to establish social welfare conditions through social legislation and accountable business practices that would lay the groundwork for the business system to regain its footing. As the great depression ended in the economic preparations for US entry into World War II, President Roosevelt announced that the coming war was going to be about “the four freedoms,” one of which is “freedom from want.”⁴²

The basic things expected by our people of their political and economic systems are simple. They are: Equality of opportunity for youth and for others, Jobs for all who can work. Security for those who need it. The ending of special privilege for the few. The preservation of civil liberties for all. The enjoyment of the fruits of scientific progress in a wider and constantly rising standard of living.

The long expansion following World War II culminated in the economic prosperity of the decade of the 1960's., another era in which there was a serious focus on economic security. In the 1960's struggles for equality in the context of an economy of abundance led to a focus on economic security. The tone of the years from about 1964 to 1972 is captured by Michael Harrington, writing on the relationship of the “Great Society” and the “War on Poverty”:⁴³

A conservative intervention which limits itself to stimulating the economy through fiscal and monetary means will have the most reactionary consequences. It may well achieve business “prosperity” but there is no evidence that it will generate sufficient new employments, or the right kinds of new jobs to give youths their economic opportunity.

...what is being timidly posed is that most basic of all issues: the necessity of subjecting economic power to the democratic will of the people. Or, in classic terms, this is a first and tiny installment in the ideological struggle to make human need, rather than private profit, the criterion for economic decisions.

⁴² Roosevelt, Franklin Delano, “The Four Freedoms,” delivered before the 77th Congress, January 6, 1941.

⁴³ Harrington, Michael, “Introduction” to Louis A. Ferman, Joyce L. Kornbluh, and Alan Haber, *Poverty in America, A Book of Readings*. Ann Arbor: The University of Michigan Press, 1965, Pp. ix-x.

What is a stake in insuring economic security is embodied in the tension between profit maximization and corporate social responsibility.⁴⁴ However, the tension is not between the principle of social welfare (the good of the community) and profit, but whether the pursuit of profit is subordinate to corporate social accountability and social regulation.

Similarly, today there is a call for accurate accounting and the renewal of corporate social responsibility. The problem of affordability fits within this context as the country enters, at best, an uncertain economic time.

F. From “Personal Troubles” to Social Issues

In the past several years, common speech has changed so that it is now common to say “I have some issues with that,” rather than “I have a problem.” With changes in the national economy of the US, and reflected in the City of Philadelphia fundamental “personal troubles” become transformed into issues.

“*Troubles* occur within the character of the individual and within the range of [their] immediate relations with others; they have to do with [their] self and with those limited areas of social life of which [they are] directly and personally aware.”⁴⁵ If 5% of 20,000 households have problems meeting their utility bills (have affordability problems, or are payment-troubled), then we might look to their family histories, their personal problems, to problems of personal character (decisions), or a family’s chance encounter with difficult illnesses or severe accidents. Troubles occur to families at all economic levels.⁴⁶ For payment difficulties to occur to 500 out of 20,000 households, we would look to the problems of the household, to education, and to job skills, and to chance to understand the problems. But the case with issues is different, and requires different solutions.

⁴⁴ The alternative perspective emphasizes pure profits. This perspective was dominant during the period of economic expansion and the associated dramatic growth of inequality from about 1972 to about 2002. Perhaps the clearest statement of the “amoral” theory of business is that of Chicago School economist, Milton Friedman, “Few trends could so thoroughly undermine the very foundations of our free society as the acceptance by corporate officials of a social responsibility other than to make as much money for their stockholders as possible. This is a fundamentally subversive doctrine. If business people do have a social responsibility other than making maximum profits, how are they to know what it is?” Friedman, Milton, *Capitalism and Freedom*. Chicago: University of Chicago Press, 1972, P. 133.

⁴⁵ Mills, C. Wright, *The Sociological Imagination*. London, Oxford, New York: Oxford University Press, 1959, P.8. The contrast of troubles and issues here follows exactly Mills’ presentation of the contrast as an analytic tool (Pp. 8-11).

⁴⁶ Encounter with troubles is a part of the human condition: “The race is not to the swift or the battle to the strong, nor does food come to the wise or wealth to the brilliant or favor to the learned; but time and chance happen to them all.” Ecclesiastes 9:11. Here, however, we are examining a very strong pattern of affordability problems, not a matter of time and chance.

“Issues have to do with matters that transcend these local environments of the individual and the range of [their] inner life. They have to do with ... organization...the larger structure of social and historical life.”⁴⁷ If 60% of households experience payment problems or if only 15% of customers experience affordable bills under a conservative interpretation of the definition of affordability as set forth in the Pennsylvania Code, the personal payment troubles are a social issue. In that case, household problems may contribute to payment problems, as may chance events (illness, accident). However, the root problem is at the organizational or institutional level (program design). Then the issue is a public social issue that can only be successfully addressed at the higher level of rate structure, program design, incomes and social welfare policy, or job structure of the City, or all of these. Of these, only rate structure and program design are tractable to the utility, the LIURP advisory committee, and the Commission. The others require independent action by other players.

G. Need

Typically, a formal Needs Assessment would contain the six component results specified in the Pennsylvania Code (Figure X-1).⁴⁸

UNIVERSAL SERVICE NEEDS ASSESSMENT
<p>A. THE NUMBER OF IDENTIFIED LOW -INCOME CUSTOMERS.</p> <p>B. AN ESTIMATE OF LOW -INCOME CUSTOMERS.</p> <p>C. THE NUMBER OF IDENTIFIED PAYMENT TROUBLED, LOW-INCOME CUSTOMERS.</p> <p>D. AN ESTIMATE OF PAYMENT TROUBLED, LOW-INCOME CUSTOMERS.</p> <p>E. THE TOTAL NUMBER OF CUSTOMERS WHO STILL NEED LIURP SERVICES AND THE COST TO SERVE THAT NUMBER.</p> <p>F. THE ENROLLMENT SIZE OF CAP TO SERVE ALL ELIGIBLE CUSTOMERS.</p>

Figure X-1: Six Components of a Formal Needs Assessment

⁴⁷ Mills, C. Wright, op. cit., P. 8.

⁴⁸ Title 52, Pennsylvania Code §69.4(b)(3) outlines the Needs Assessment in the context of developing Universal Service and Energy Conservation Plans.

This intermediate needs assessment will be restricted to the population range of 0-50% Federal Poverty Level, consistent with the scope of this study, instead of the range of 0-150% FPL typically included in a needs assessment.

NEEDS ASSESSMENT: CALCULATING RESULTS
<p>The number of identified low-income customers. Include the followings accounts: all Level 1 and Level 2 customers who have payment agreements, all accounts who have received LIURP, all CAP customers, all accounts that have received LIHEAP or other energy assistance grants, and all accounts whose financial summaries show incomes below 150% of the poverty guidelines. Include accounts that meet the income criteria even if they are not on payment plans. Use a 12-month average.</p>
<p>An estimate of low-income customers. Use the most recent Census data at the most appropriate level (county, zip code).</p>
<p>The number of identified payment troubled, low-income customers (Number 3 is a subset of Number 1) Include all customers whose incomes are below 150% of the poverty guidelines who have payment agreements. Payment troubled is defined at \$54.72, \$62.2, and \$ 69.262 as a household that has failed to maintain one or more payment arrangements in a 1-year period. Use a 12-month average.</p>
<p>An estimate of potentially payment troubled, low-income customers. Subtract Number 1 (number of identified low-income customers) from Number 2 (estimate of low-income customers).</p>
<p>The numbers of customers who still need LIURP services and the cost to serve that number. Include the number of customers who meet the LIURP eligibility criteria. See Attachment 1 for methodology. Estimate the cost to serve the numbers who are eligible.</p>
<p>The enrollment size of CAP to serve all eligible customers. Consider responses to numbers 1-4 to determine maximum enrollment size.</p>

Figure X-2: BCS Instruction on Needs Assessment.

The typical needs assessment for this population group would proceed from detailed census data. However, this census data will not be available for several months. Therefore, for the purpose of this analysis an interim needs estimate will be compiled from (1) 1990 and 2000 census data, (2) data

from CAP program evaluations, and (3) recent utility data. A recent communication from the Bureau of Consumer Services provides approaches to develop these results (Figure X-2).⁴⁹

H. Census Estimate

For this estimate, the information from the 1990 census is used. According to the 1990 federal census, about 10.7% of Philadelphia County residents lived below 50% of the Federal Poverty Level in 1989.⁵⁰ In Figure X-3 multiplication of the 1990 Census percentage by the published Census 2000 population of Philadelphia County yields an estimate of 162,377 persons living below 50% of the Federal Poverty Level in 2000.⁵¹ Dividing this estimate by the published Census 2000 estimate of 2.48 persons per household in Philadelphia yields an estimate of 65,474 households living at or below 50% of the Federal Poverty Level.

Philadelphia County		
Percentage of Persons at or Below 50% of the Federal Poverty Level (1990 Census)	Population (2000 Census)	Estimate of Persons at or Below 50% of the Federal Poverty Level (Needs Assessment)
10.7%	1,517,550	162,377

Figure X-3: Persons, 0% -50% of FPL, Philadelphia County

However, since the PECO electric service area includes all or portions of several surrounding counties, an estimate from Philadelphia County alone will be too low.⁵²

In the Customer Assistance Program operated from 1992 to 1998, about 27% of Customer Assistance Program participants were in the outer counties.⁵³ This means the 162,377 persons from

⁴⁹ Letter of Janice K. Hummel, Bureau of Consumer Services to David O. Epple, CAE, Vice-President—Regulatory Affairs, Energy Association of Pennsylvania, May 24, 2001, Attachment 2.

⁵⁰ Bureau of the Census, Internet Site, 1990 Census, Table P121.

⁵¹ Bureau of the Census, Internet Site, USA Quick facts, Philadelphia County, Pennsylvania.

⁵² A reasonably accurate estimate of the number of households in the 0-50% FPL would be provided by using the latest 2000 county level census data and a detailed map of the PECO service territory. The detailed 2000 census data will not be available until summer 2002. Until that time the number is approximated by a higher and a lower bound, derived from recent billing data of CAP and non-CAP low-income participants, and CAP evaluation results.

the third column of Figure X-2 represent about 73% of persons, and that the total for PECO is approximately 222,434 persons living below 50% of the Federal Poverty Level. Dividing by the Philadelphia County estimate of persons per household (2.48), this yields a final estimate of 89,691. The resulting census-based estimate of need for households for the PECO Energy service territory (gas and electric service) living at 50% of poverty or below is 89,691.

I. Customer Records-Based Estimate

From PECO participation levels by month, income at or below 50% of poverty, as represented to the Pennsylvania Public Service Commission for the year 2000,⁵⁴ an average CAP participation can be calculated. The average is 39,469 per month. Similarly, the total number of CAP customer averages 84,001 per month, and the average number of confirmed low-income customers is 192,517 per month. The ratio of CAP customers to confirmed low-income customers is 43.633%.

For every household in CAP there are 2.293 identified low-income households. If the same ratio holds across the income blocks, this means there are approximately 90,458 households in the range of 0-50% of the FPL.

Comparing both the utility based and the census based estimates gives a narrow range of 89,691 to 90,458 customers living at 50% FPL or lower. The average of these two estimates is 90,075.

⁵³ This data is best for the estimate because it is based on a mature program (the POB/PIPP approach) and not on a pilot. Peach, H. Gil, *Impact Assessment of the PECO Energy "CAP Rate" Pilot*. Beaverton, Oregon: H. Gil Peach & Associates, 1988, Monograph 988-1, P. 42, and Figure 18, page 43.

⁵⁴ Reporting Requirements, 2000. The Evaluation Team has not confirmed these numbers, but will use the participation levels as PECO reported to the PUC to estimate participation.

PECO CAP & Confirmed Low-Income Households, 2000					
Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6
	Income Block			Total CAP	Confirmed Low-Income
	0-50%	51-100%	101-150%		
January	43,130	26,068	12,752	81,950	190,471
February	43,035	26,385	12,965	82,385	190,441
March	42,738	27,077	13,224	83,039	190,657
April	42,287	27,700	13,525	83,512	193,412
May	41,591	27,978	13,626	83,195	193,781
June	40,915	29,805	14,558	85,278	193,570
July	40,531	30,287	14,777	85,595	192,721
August	39,791	31,186	15,205	86,182	193,708
September	39,108	31,943	15,562	86,613	193,052
October	34,250	34,273	16,364	84,887	193,730
November	33,487	33,667	16,016	83,170	190,995
December	32,770	33,524	15,911	82,205	193,664
Average	39,469	29,991	14,540	84,001	192,517

Source: PECO Universal Services Reporting Requirements, Input Document, December 13, 2001.

Figure X-4: Summary of 0-50% FPL customers – PECO Filing.

This estimate is used to establish an upper bound limit of approximately 90,000 CAP program participants in the range of 0-50% FPL. The lower bound estimate of CAP program participants will be taken as 39,500, a number roughly representative of the current CAP population in this range.⁵⁵

Figure X-5 gives the upper and lower bounds for the CAP population at or below 50% FPL to be used in subsequent portions of this analysis. In this figure the upper bound has been prorated into RJ and RHJ using the proportions for these rates in the current CAP program.

⁵⁵ Both estimates are rounded to the nearest one hundred households. The estimates for participation within each Rate were computed using a multiplier based on usage data and rate code records derived from the Evaluation Database. This multiplier was determined by a subset of 18,853 CAP participants and 37,436 LITS accounts with complete data in the Evaluation Database.

Potential CAP Population at or Below 50% of Poverty		
Rate	Lower Bound	Upper Bound
RJ	32,391	73,803
RJ with PECO gas	4,134	9,419
RHJ	1,370	3,122
Total	39,500	90,000

Figure X-5: Upper and Lower Estimates.

The wide gap between CAP households and the population of 0-50% FPL customers is indicative; it suggests that this portion of the CAP program could be increased significantly.

This estimate should be refined later in 2002 in the context of a formal needs assessment when the county level 2000 census data becomes available. But even this interim estimate suggests that prudent program planning should anticipate and develop through comments and proposals, a plan for a significant recruitment in this portion of the CAP programs. As discussed earlier and as indicated below, the current economic context in which the calculation is carried out is bleak.

J. Economic Realities

The following three pictures summarize realities of the current economic context. These are problems that we cannot address; we can only address technical issues. However, the best technical innovations in program design need to be related to the real social and economic context, rather than the hype and spin of media promotion, if only from a Darwinian perspective. We need to maintain the best of current systems, and to innovate better systems for making each service dollar go as far as it can to meet energy needs of families. At the same time, a Customer Assistance Program must be operated according to its design and with tight control and open accountability. We need to work for “highly accountable” and “best” service under the economic constraints we are given.

The first reality is a picture of household economic inequality in the American business system. It is often asked, “Why is it that people do not pay bills?” A good part of the answer lies in the extreme economic inequality structured into the economic system. As shown in Figure X-5, the top 5% of households receives over 20% of income while the bottom 20% of households receives under 4% of income. If the economy took the same form, but with moderate inequality, it is likely that utility payment problems would disappear as an issue.

global trend of increasing inequality also affecting many European countries as globalization becomes a stronger force across national economies. However, the effect is much stronger for the US than for Europe (the Gini coefficient for Canada is about 37, for Germany approximately 33, for Norway about 26). The trend toward underdevelopment of the US would accelerate under depression conditions, but to be conservative we can say that the basic structure of income (and, for that matter, wealth) in the US has changed from the “mature business system” of the 1960’s back towards the “bad old days” of an immature business system. The US Gini coefficient is currently far higher than that of any of the other industrialized countries.

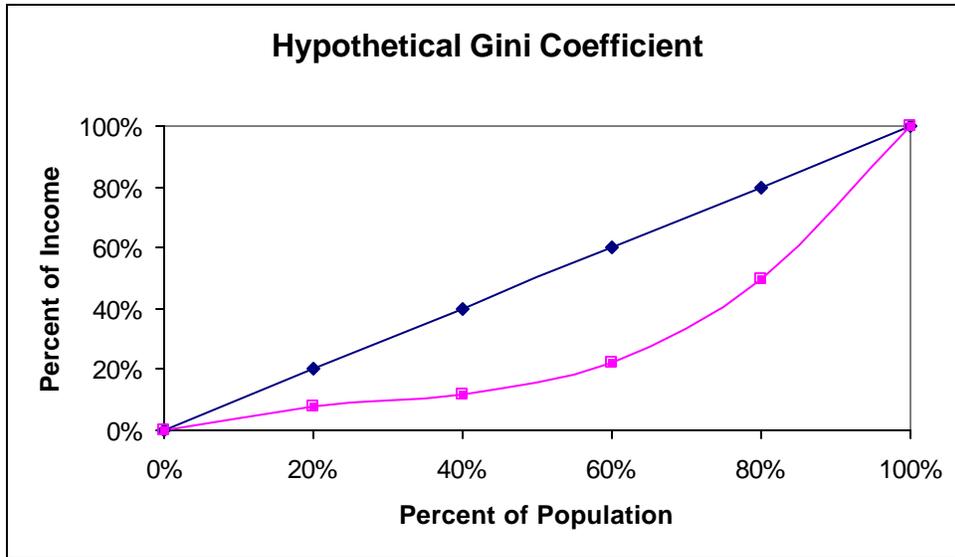


Figure X-7: Calculation of the Gini Coefficient

Figures X-7 and X-8 show effects of these trends associated with globalization for Philadelphia incomes, and for the incomes of Pennsylvania families with children.

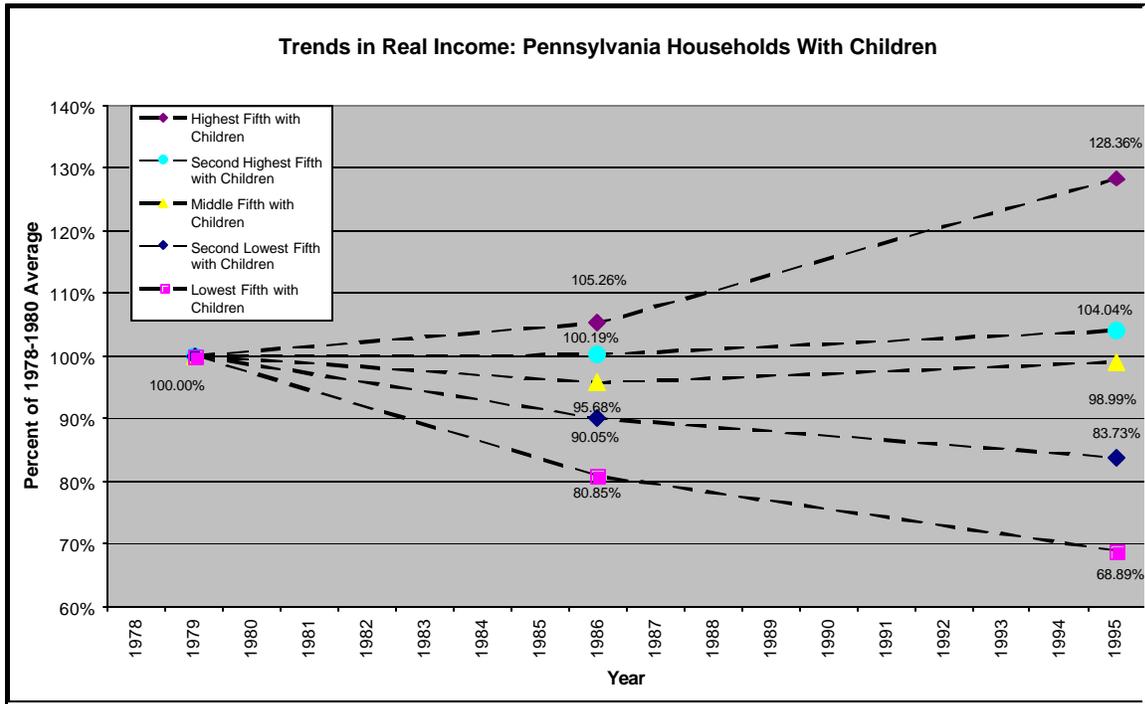
**CHANGE IN AVERAGE REAL INCOME 1986-94
CITY VS. SUBURBS**

	City	Suburbs
Poorest Quintile	-54.2%	-42.5%
Middle Three Quintiles	-24.5%	-11.1%
Richest Quintile	-6.4%	+4.3%

Source: Table 7.1, P. 67, Jonathan A. Saidel, City Controller, *1997 Mid-Year Economic and Financial Report*. Philadelphia: Office of the Controller, March 1997.

Figure X-8: Why it is Harder for Philadelphia Low-Income Families to Pay.

Figure X-9: Inequality Increases for Families with Children.



Summary

XI. PUTTING IT ALL TOGETHER

The affordability issues for the 1-50% FPL population may be distinctly different than for remainder of the low income population (those in the range of 51-150% FPL). We will not know for sure until the data analysis for the full Universal Services Evaluation Report is completed in the fall of 2002.

This study shows current CAP rates for both gas and electric service to participants in the 0-50% FPL are *well above* the affordability limits. The current gas and electric CAP rates offer average bill discounts from general rates of 30% and 35% respectively. Discounts of almost double these current discounts are necessary in-order to meet the affordability criteria as specified in the Pennsylvania Code. In other words, PECO would have to either dramatically increase the discount structure of the current two-tier CAP Rate, change the CAP Rate into a multi-tiered structure similar to new structure adopted by National Fuel Gas, or return to a PIPP or POB/PIPP structure and offer the income related rates that it did in the past. This third alternative would also be the optimal solution from a collections perspective (See Footnote 26).

Another related finding shows that the size of the current CAP program population is smaller than would be expected based on census and poverty information. In fact, census information supports the possibility that the CAP program population in the 1-50% FPL could triple if the program were intensively communicated to qualifying households. There appears to be a large reservoir of potentially eligible CAP program participants. These households can be reached by a combination of affordable rates and active outreach (bill stuffers, radio ads, community service networks, etc.).

If CAP program rates were set to affordable levels, it is reasonable to expect that program population would increase significantly. The dynamics of the current situation strongly support the likelihood of a significant increase in program participation if: 1) there is a large reservoir of potentially eligible participants, and 2) the magnitude of the reduction in bills is large enough to elicit wider participation.

Interviews with program participants indicate that the dominant means of learning about the program is through acquaintances and other program participants. It is reasonable to expect that if energy bills were cut in half relative to current CAP rate bills (as in the PECO PIPP and PECO POB-PIPP program approaches), the word would spread quickly. Generally speaking, if current CAP rates were reduced by half the CAP program population in the 1-50% FPL would find a new equilibrium.

With unaffordable rates, payment is not discretionary; the customers are simply not able to pay the full rates on a sustained basis (in part, because successful collections by the electric utility will lead to skipping payments to the gas utility, deferring necessary medical care, and the like – the income simply is not there whether or not the electric bill collections effort is successful in any particular period). If the very low income cannot pay more in rates, then the remainder of the customers at large necessarily takes up the slack one way or another. *This is the current situation.* PECO's customers are already absorbing the shortfall caused by the inability of the very poor to pay for the energy they require, but without the provision of affordable rates.

Embedded in the current utility rates is an equity return on the working capital associated with the arrearages accruing from the current CAP rates which appear to be predominantly unaffordable for participants in the 0-50% FPL . Current rates also include recovery for a portion of uncollectable revenue, and arrearages written off.

To the extent that the revenues are un-affordable or un-collectable the total shortfall will remain essentially the same. Changing the size and or rates of a CAP program will alter the components of the shortfall with changes in the aggregate CAP discount, the aggregate arrearages, and the write-offs, but in total it will be the same shortfall. The cost recovery mechanisms for PA CAP programs provide an orderly mechanism for working with unaffordable energy costs.

The essential difference in larger program participation is not, then, a new cost to the utility. It is, rather, that a larger proportion of low-income customers experience affordable rates and regain the pattern of regular payment. The CAP provides a set of tools for working with and tailoring service to low-income customers. The true net change in expansion of CAP participation vs. non-CAP in this situation is likely either neutral or slightly positive.

Finally, the result of each of the four methods used to examine affordability confirms serious affordability problems for customers with lower incomes and moderate to higher energy use. These are the analysis customer interviews, the comparative bill analysis, the sector map analysis, and the billing and payments analysis.

On net, this evaluation demonstrates the need for revision of the program design for the customers at 50% of the Federal Poverty Level and below. The recommendation from the evaluators is to move the 1-50% of poverty group to a separate tier and change the design for this tier to a PIPP.

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XIII. PA CODE TITLE 52 CH. 69.265 MONTHLY BILL LIMITS FOR 0-50% FPL

PA Code Title 52 Ch. 69.265 Monthly Bill Limits for the 0-50% FPL Group

Minimum Bill and Affordability Limits

Family Size	Poverty Level	Monthly Income	PA Code Minimum Monthly Bill		PA Code Maximum Affordability Limit	
			Rate R Minimum Bill	Rate R-H Minimum Bill	Rate R Affordability Limit (5% Gross Income)	Rate R-H Affordability Limit (13% Gross Income)
1	20%	\$143.17	\$12.00	\$30.00	\$7.16	\$18.61
1	30%	\$214.75	\$12.00	\$30.00	\$10.74	\$27.92
1	40%	\$286.33	\$12.00	\$30.00	\$14.32	\$37.22
1	50%	\$357.92	\$12.00	\$30.00	\$17.90	\$46.53
2	20%	\$193.50	\$12.00	\$30.00	\$9.68	\$25.16
2	30%	\$290.25	\$12.00	\$30.00	\$14.51	\$37.73
2	40%	\$387.00	\$12.00	\$30.00	\$19.35	\$50.31
2	50%	\$483.75	\$12.00	\$30.00	\$24.19	\$62.89
3	20%	\$243.83	\$12.00	\$30.00	\$12.19	\$31.70
3	30%	\$365.75	\$12.00	\$30.00	\$18.29	\$47.55
3	40%	\$487.67	\$12.00	\$30.00	\$24.38	\$63.40
3	50%	\$609.58	\$12.00	\$30.00	\$30.48	\$79.25
4	20%	\$294.17	\$12.00	\$30.00	\$14.71	\$38.24
4	30%	\$441.25	\$12.00	\$30.00	\$22.06	\$57.36
4	40%	\$588.33	\$12.00	\$30.00	\$29.42	\$76.48
4	50%	\$735.42	\$12.00	\$30.00	\$36.77	\$95.60
5	20%	\$344.50	\$12.00	\$30.00	\$17.23	\$44.79
5	30%	\$516.75	\$12.00	\$30.00	\$25.84	\$67.18
5	40%	\$689.00	\$12.00	\$30.00	\$34.45	\$89.57
5	50%	\$861.25	\$12.00	\$30.00	\$43.06	\$111.96
6	20%	\$394.83	\$12.00	\$30.00	\$19.74	\$51.33
6	30%	\$592.25	\$12.00	\$30.00	\$29.61	\$76.99
6	40%	\$789.67	\$12.00	\$30.00	\$39.48	\$102.66
6	50%	\$987.08	\$12.00	\$30.00	\$49.35	\$128.32

Minimum Bill > Affordability Limit

XIV. BILLS IN THE PIPP-PILOT AND PIPP PROGRAM APPROACH

Residential Billing Amounts Under PIPP-Pilot (1984-1988) and PIPP (1988-March 1992) Programs

Minimum Bill Limit Applied

Family Size=1		Annual Income		PIPP Pilot Monthly Bill RATE R	PIPP Pilot Monthly Bill RATE RH	PIPP Monthly Bill Rate R	PIPP Monthly Bill Rate RH
		Gross Income	After Tax Income				
Percent of Poverty							
	5%	\$429.50	\$300.65	\$2.00	\$2.00	\$5.00	\$5.00
	10%	\$859.00	\$601.30	\$2.00	\$4.01	\$5.00	\$5.00
	15%	\$1,288.50	\$901.95	\$2.25	\$6.01	\$5.00	\$6.01
	20%	\$1,718.00	\$1,202.60	\$3.01	\$8.02	\$5.00	\$8.02
	25%	\$2,147.50	\$1,503.25	\$3.76	\$10.02	\$5.00	\$10.02
	30%	\$2,577.00	\$1,803.90	\$4.51	\$12.03	\$5.00	\$12.03
	35%	\$3,006.50	\$2,104.55	\$5.26	\$14.03	\$5.26	\$14.03
	40%	\$3,436.00	\$2,405.20	\$6.01	\$16.03	\$6.01	\$16.03
	45%	\$3,865.50	\$2,705.85	\$6.76	\$18.04	\$6.76	\$18.04
	50%	\$4,295.00	\$3,006.50	\$7.52	\$20.04	\$7.52	\$20.04
	100%	\$8,590.00					

Family Size=2		Annual Income		PIPP Pilot Monthly Bill RATE R	PIPP Pilot Monthly Bill RATE RH	PIPP Monthly Bill Rate R	PIPP Monthly Bill Rate RH
		Gross Income	After Tax Income				
Percent of Poverty							
	5%	\$580.50	\$406.35	\$2.00	\$2.71	\$5.00	\$5.00
	10%	\$1,161.00	\$812.70	\$2.03	\$5.42	\$5.00	\$5.42
	15%	\$1,741.50	\$1,219.05	\$3.05	\$8.13	\$5.00	\$8.13
	20%	\$2,322.00	\$1,625.40	\$4.06	\$10.84	\$5.00	\$10.84
	25%	\$2,902.50	\$2,031.75	\$5.08	\$13.55	\$5.08	\$13.55
	30%	\$3,483.00	\$2,438.10	\$6.10	\$16.25	\$6.10	\$16.25
	35%	\$4,063.50	\$2,844.45	\$7.11	\$18.96	\$7.11	\$18.96
	40%	\$4,644.00	\$3,250.80	\$8.13	\$21.67	\$8.13	\$21.67
	45%	\$5,224.50	\$3,657.15	\$9.14	\$24.38	\$9.14	\$24.38
	50%	\$5,805.00	\$4,063.50	\$10.16	\$27.09	\$10.16	\$27.09
	100%	\$11,610.00					

Minimum Bill Limit Applied

Family Size=3	Percent of Poverty	Annual Income		PIPP Pilot Monthly	PIPP Pilot Monthly	PIPP Monthly Bill	PIPP Monthly Bill
		Gross Income	After Tax Income	Bill RATE R	Bill RATE RH	Rate R	Rate RH
	5%	\$731.50	\$512.05	\$2.00	\$3.41	\$5.00	\$5.00
	10%	\$1,463.00	\$1,024.10	\$2.56	\$6.83	\$5.00	\$6.83
	15%	\$2,194.50	\$1,536.15	\$3.84	\$10.24	\$5.00	\$10.24
	20%	\$2,926.00	\$2,048.20	\$5.12	\$13.65	\$5.12	\$13.65
	25%	\$3,657.50	\$2,560.25	\$6.40	\$17.07	\$6.40	\$17.07
	30%	\$4,389.00	\$3,072.30	\$7.68	\$20.48	\$7.68	\$20.48
	35%	\$5,120.50	\$3,584.35	\$8.96	\$23.90	\$8.96	\$23.90
	40%	\$5,852.00	\$4,096.40	\$10.24	\$27.31	\$10.24	\$27.31
	45%	\$6,583.50	\$4,608.45	\$11.52	\$30.72	\$11.52	\$30.72
	50%	\$7,315.00	\$5,120.50	\$12.80	\$34.14	\$12.80	\$34.14
	100%	\$14,630.00					

Family Size=4	Percent of Poverty	Annual Income		PIPP Pilot Monthly	PIPP Pilot Monthly	PIPP Monthly Bill	PIPP Monthly Bill
		Gross Income	After Tax Income	Bill RATE R	Bill RATE RH	Rate R	Rate RH
	5%	\$882.50	\$617.75	\$2.00	\$4.12	\$5.00	\$5.00
	10%	\$1,765.00	\$1,235.50	\$3.09	\$8.24	\$5.00	\$8.24
	15%	\$2,647.50	\$1,853.25	\$4.63	\$12.36	\$5.00	\$12.36
	20%	\$3,530.00	\$2,471.00	\$6.18	\$16.47	\$6.18	\$16.47
	25%	\$4,412.50	\$3,088.75	\$7.72	\$20.59	\$7.72	\$20.59
	30%	\$5,295.00	\$3,706.50	\$9.27	\$24.71	\$9.27	\$24.71
	35%	\$6,177.50	\$4,324.25	\$10.81	\$28.83	\$10.81	\$28.83
	40%	\$7,060.00	\$4,942.00	\$12.36	\$32.95	\$12.36	\$32.95
	45%	\$7,942.50	\$5,559.75	\$13.90	\$37.07	\$13.90	\$37.07
	50%	\$8,825.00	\$6,177.50	\$15.44	\$41.18	\$15.44	\$41.18
	100%	\$17,650.00					

Minimum Bill Limit Applied

Family Size=5		Annual Income		PIPP Pilot Monthly	PIPP Pilot Monthly	PIPP Monthly Bill	PIPP Monthly Bill
Percent of Poverty	Gross Income	After Tax Income	Bill RATE R	Bill RATE RH	Rate R	Rate RH	
5%	\$1,033.50	\$723.45	\$2.00	\$4.82	\$5.00	\$5.00	
10%	\$2,067.00	\$1,446.90	\$3.62	\$9.65	\$5.00	\$9.65	
15%	\$3,100.50	\$2,170.35	\$5.43	\$14.47	\$5.43	\$14.47	
20%	\$4,134.00	\$2,893.80	\$7.23	\$19.29	\$7.23	\$19.29	
25%	\$5,167.50	\$3,617.25	\$9.04	\$24.12	\$9.04	\$24.12	
30%	\$6,201.00	\$4,340.70	\$10.85	\$28.94	\$10.85	\$28.94	
35%	\$7,234.50	\$5,064.15	\$12.66	\$33.76	\$12.66	\$33.76	
40%	\$8,268.00	\$5,787.60	\$14.47	\$38.58	\$14.47	\$38.58	
45%	\$9,301.50	\$6,511.05	\$16.28	\$43.41	\$16.28	\$43.41	
50%	\$10,335.00	\$7,234.50	\$18.09	\$48.23	\$18.09	\$48.23	
100%	\$20,670.00						

Family Size=6		Annual Income		PIPP Pilot Monthly	PIPP Pilot Monthly	PIPP Monthly Bill	PIPP Monthly Bill
Percent of Poverty	Gross Income	After Tax Income	Bill RATE R	Bill RATE RH	Rate R	Rate RH	
5%	\$1,184.50	\$829.15	\$2.07	\$5.53	\$5.00	\$5.53	
10%	\$2,369.00	\$1,658.30	\$4.15	\$11.06	\$5.00	\$11.06	
15%	\$3,553.50	\$2,487.45	\$6.22	\$16.58	\$6.22	\$16.58	
20%	\$4,738.00	\$3,316.60	\$8.29	\$22.11	\$8.29	\$22.11	
25%	\$5,922.50	\$4,145.75	\$10.36	\$27.64	\$10.36	\$27.64	
30%	\$7,107.00	\$4,974.90	\$12.44	\$33.17	\$12.44	\$33.17	
35%	\$8,291.50	\$5,804.05	\$14.51	\$38.69	\$14.51	\$38.69	
40%	\$9,476.00	\$6,633.20	\$16.58	\$44.22	\$16.58	\$44.22	
45%	\$10,660.50	\$7,462.35	\$18.66	\$49.75	\$18.66	\$49.75	
50%	\$11,845.00	\$8,291.50	\$20.73	\$55.28	\$20.73	\$55.28	
100%	\$23,690.00						

Minimum Bill Limit Applied

Family Size=7		Annual Income		PIPP Pilot Monthly	PIPP Pilot Monthly	PIPP Monthly Bill	PIPP Monthly Bill
Percent of Poverty	Gross Income	After Tax Income	Bill RATE R	Bill RATE RH	Rate R	Rate RH	
5%	\$1,335.50	\$934.85	\$2.34	\$6.23	\$5.00	\$6.23	
10%	\$2,671.00	\$1,869.70	\$4.67	\$12.46	\$5.00	\$12.46	
15%	\$4,006.50	\$2,804.55	\$7.01	\$18.70	\$7.01	\$18.70	
20%	\$5,342.00	\$3,739.40	\$9.35	\$24.93	\$9.35	\$24.93	
25%	\$6,677.50	\$4,674.25	\$11.69	\$31.16	\$11.69	\$31.16	
30%	\$8,013.00	\$5,609.10	\$14.02	\$37.39	\$14.02	\$37.39	
35%	\$9,348.50	\$6,543.95	\$16.36	\$43.63	\$16.36	\$43.63	
40%	\$10,684.00	\$7,478.80	\$18.70	\$49.86	\$18.70	\$49.86	
45%	\$12,019.50	\$8,413.65	\$21.03	\$56.09	\$21.03	\$56.09	
50%	\$13,355.00	\$9,348.50	\$23.37	\$62.32	\$23.37	\$62.32	
100%	\$26,710.00						

Family Size=8		Annual Income		PIPP Pilot Monthly	PIPP Pilot Monthly	PIPP Monthly Bill	PIPP Monthly Bill
Percent of Poverty	Gross Income	After Tax Income	Bill RATE R	Bill RATE RH	Rate R	Rate RH	
5%	1,486.50	1,040.55	\$2.60	\$6.94	\$5.00	\$6.94	
10%	2,973.00	2,081.10	\$5.20	\$13.87	\$5.20	\$13.87	
15%	4,459.50	3,121.65	\$7.80	\$20.81	\$7.80	\$20.81	
20%	5,946.00	4,162.20	\$10.41	\$27.75	\$10.41	\$27.75	
25%	7,432.50	5,202.75	\$13.01	\$34.69	\$13.01	\$34.69	
30%	8,919.00	6,243.30	\$15.61	\$41.62	\$15.61	\$41.62	
35%	10,405.50	7,283.85	\$18.21	\$48.56	\$18.21	\$48.56	
40%	11,892.00	8,324.40	\$20.81	\$55.50	\$20.81	\$55.50	
45%	13,378.50	9,364.95	\$23.41	\$62.43	\$23.41	\$62.43	
50%	14,865.00	10,405.50	\$26.01	\$69.37	\$26.01	\$69.37	
100%	29,730.00						

XV. BILLS IN POB-PIPP PROGRAM

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 1		Poverty Level 20% or Less			
Usage/Mo (KW h)	POB/PIPP Rate	POB/PIPP Rate	POB/PIPP Rate	R-POB/PIPP Rate	R-
	R Summer	R Winter	H Summer	H Winter	
100	\$12.00	\$12.00	\$30.00	\$30.00	
200	\$12.00	\$12.00	\$30.00	\$30.00	
300	\$12.00	\$12.00	\$30.00	\$30.00	
400	\$12.00	\$12.00	\$30.00	\$30.00	
500	\$12.00	\$12.00	\$30.00	\$30.00	
600	\$12.00	\$12.00	\$30.00	\$30.00	
700	\$12.00	\$12.00	\$30.00	\$30.00	
800	\$12.00	\$12.00	\$30.00	\$30.00	
900	\$12.00	\$12.00	\$30.00	\$30.00	
1000	\$12.00	\$12.00	\$30.00	\$30.00	
1100	\$12.00	\$12.00	\$30.00	\$30.00	
1200	\$12.00	\$12.00	\$30.00	\$30.00	
1300	\$12.00	\$12.00	\$30.00	\$30.00	
1400	\$12.00	\$12.00	\$30.00	\$30.00	
1500	\$12.00	\$12.00	\$30.00	\$30.00	
1600	\$12.00	\$12.00	\$30.00	\$30.00	
1700	\$12.00	\$12.00	\$30.00	\$30.00	
1800	\$12.00	\$12.00	\$30.00	\$30.00	
1900	\$12.00	\$12.00	\$30.00	\$30.00	
2000	\$12.00	\$12.00	\$30.00	\$30.00	
2100	\$12.00	\$12.00	\$30.00	\$30.00	
2200	\$12.00	\$12.00	\$30.00	\$30.00	
2300	\$12.00	\$12.00	\$30.00	\$30.00	
2400	\$12.00	\$12.00	\$30.00	\$30.00	
2500	\$12.00	\$12.00	\$30.00	\$30.00	

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 1

Poverty Level 25%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R- H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$14.32	\$14.32	\$30.00	\$30.00
400	\$14.32	\$14.32	\$30.00	\$30.00
500	\$14.32	\$14.32	\$30.00	\$30.00
600	\$14.32	\$14.32	\$30.00	\$30.00
700	\$14.32	\$14.32	\$30.00	\$30.00
800	\$14.32	\$14.32	\$30.00	\$30.00
900	\$14.32	\$14.32	\$30.00	\$30.00
1000	\$14.32	\$14.32	\$30.00	\$30.00
1100	\$14.32	\$14.32	\$30.00	\$30.00
1200	\$14.32	\$14.32	\$30.00	\$30.00
1300	\$14.32	\$14.32	\$30.00	\$30.00
1400	\$14.32	\$14.32	\$30.00	\$30.00
1500	\$14.32	\$14.32	\$30.00	\$30.00
1600	\$14.32	\$14.32	\$30.00	\$30.00
1700	\$14.32	\$14.32	\$30.00	\$30.00
1800	\$14.32	\$14.32	\$30.00	\$30.00
1900	\$14.32	\$14.32	\$30.00	\$30.00
2000	\$14.32	\$14.32	\$30.00	\$30.00
2100	\$14.32	\$14.32	\$30.00	\$30.00
2200	\$14.32	\$14.32	\$30.00	\$30.00
2300	\$14.32	\$14.32	\$30.00	\$30.00
2400	\$14.32	\$14.32	\$30.00	\$30.00
2500	\$14.32	\$14.32	\$30.00	\$30.00

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 1

Poverty Level 30%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R-H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$17.18	\$17.18	\$30.00	\$30.00
500	\$17.18	\$17.18	\$30.00	\$30.00
600	\$17.18	\$17.18	\$31.47	\$31.47
700	\$17.18	\$17.18	\$32.21	\$32.21
800	\$17.18	\$17.18	\$32.21	\$32.21
900	\$17.18	\$17.18	\$32.21	\$32.21
1000	\$17.18	\$17.18	\$32.21	\$32.21
1100	\$17.18	\$17.18	\$32.21	\$32.21
1200	\$17.18	\$17.18	\$32.21	\$32.21
1300	\$17.18	\$17.18	\$32.21	\$32.21
1400	\$17.18	\$17.18	\$32.21	\$32.21
1500	\$17.18	\$17.18	\$32.21	\$32.21
1600	\$17.18	\$17.18	\$32.21	\$32.21
1700	\$17.18	\$17.18	\$32.21	\$32.21
1800	\$17.18	\$17.18	\$32.21	\$32.21
1900	\$17.18	\$17.18	\$32.21	\$32.21
2000	\$17.18	\$17.18	\$32.21	\$32.21
2100	\$17.18	\$17.18	\$32.21	\$32.21
2200	\$17.18	\$17.18	\$32.21	\$32.21
2300	\$17.18	\$17.18	\$32.21	\$32.21
2400	\$17.18	\$17.18	\$32.21	\$32.21
2500	\$17.18	\$17.18	\$32.21	\$32.21

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 1

Poverty Level 35%

Usage/Mo (KW h)	POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R	
	Summer	Winter	R-H Summer	H Winter		
100	\$12.00	\$12.00	\$30.00	\$30.00		
200	\$12.00	\$12.00	\$30.00	\$30.00		
300	\$16.80	\$16.80	\$30.00	\$30.00		
400	\$20.04	\$20.04	\$30.00	\$30.00		
500	\$20.04	\$20.04	\$30.00	\$30.00		
600	\$20.04	\$20.04	\$31.47	\$31.47		
700	\$20.04	\$20.04	\$37.06	\$33.89		
800	\$20.04	\$20.04	\$37.58	\$36.31		
900	\$20.04	\$20.04	\$37.58	\$37.58		
1000	\$20.04	\$20.04	\$37.58	\$37.58		
1100	\$20.04	\$20.04	\$37.58	\$37.58		
1200	\$20.04	\$20.04	\$37.58	\$37.58		
1300	\$20.04	\$20.04	\$37.58	\$37.58		
1400	\$20.04	\$20.04	\$37.58	\$37.58		
1500	\$20.04	\$20.04	\$37.58	\$37.58		
1600	\$20.04	\$20.04	\$37.58	\$37.58		
1700	\$20.04	\$20.04	\$37.58	\$37.58		
1800	\$20.04	\$20.04	\$37.58	\$37.58		
1900	\$20.04	\$20.04	\$37.58	\$37.58		
2000	\$20.04	\$20.04	\$37.58	\$37.58		
2100	\$20.04	\$20.04	\$37.58	\$37.58		
2200	\$20.04	\$20.04	\$37.58	\$37.58		
2300	\$20.04	\$20.04	\$37.58	\$37.58		
2400	\$20.04	\$20.04	\$37.58	\$37.58		
2500	\$20.04	\$20.04	\$37.58	\$37.58		

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 1

Poverty Level = 40%

Usage/Mo (KWh)	POB/PIPP Rate		POB/PIPP Rate		POB/PIPP Rate	
	R Summer	R Winter	R-H Summer	H Winter	R	R
100	\$12.00	\$12.00	\$30.00	\$30.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00	\$30.00	\$30.00
500	\$22.91	\$22.91	\$30.00	\$30.00	\$30.00	\$30.00
600	\$22.91	\$22.91	\$31.47	\$31.47	\$31.47	\$31.47
700	\$22.91	\$22.91	\$37.06	\$37.06	\$37.06	\$33.89
800	\$22.91	\$22.91	\$42.66	\$42.66	\$42.66	\$36.31
900	\$22.91	\$22.91	\$42.95	\$42.95	\$42.95	\$38.73
1000	\$22.91	\$22.91	\$42.95	\$42.95	\$42.95	\$41.15
1100	\$22.91	\$22.91	\$42.95	\$42.95	\$42.95	\$42.95
1200	\$22.91	\$22.91	\$42.95	\$42.95	\$42.95	\$42.95
1300	\$22.91	\$22.91	\$42.95	\$42.95	\$42.95	\$42.95
1400	\$22.91	\$22.91	\$42.95	\$42.95	\$42.95	\$42.95
1500	\$22.91	\$22.91	\$42.95	\$42.95	\$42.95	\$42.95
1600	\$22.91	\$22.91	\$42.95	\$42.95	\$42.95	\$42.95
1700	\$22.91	\$22.91	\$42.95	\$42.95	\$42.95	\$42.95
1800	\$22.91	\$22.91	\$42.95	\$42.95	\$42.95	\$42.95
1900	\$22.91	\$22.91	\$42.95	\$42.95	\$42.95	\$42.95
2000	\$22.91	\$22.91	\$42.95	\$42.95	\$42.95	\$42.95
2100	\$22.91	\$22.91	\$42.95	\$42.95	\$42.95	\$42.95
2200	\$22.91	\$22.91	\$42.95	\$42.95	\$42.95	\$42.95
2300	\$22.91	\$22.91	\$42.95	\$42.95	\$42.95	\$42.95
2400	\$22.91	\$22.91	\$42.95	\$42.95	\$42.95	\$42.95
2500	\$22.91	\$22.91	\$42.95	\$42.95	\$42.95	\$42.95

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 1

Poverty Level = 45%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R H Summer	POB/PIPP Rate R R-H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$25.77	\$25.77	\$30.00	\$30.00
600	\$25.77	\$25.77	\$31.47	\$31.47
700	\$25.77	\$25.77	\$37.06	\$33.89
800	\$25.77	\$25.77	\$42.66	\$36.31
900	\$25.77	\$25.77	\$48.25	\$38.73
1000	\$25.77	\$25.77	\$48.32	\$41.15
1100	\$25.77	\$25.77	\$48.32	\$43.57
1200	\$25.77	\$25.77	\$48.32	\$45.99
1300	\$25.77	\$25.77	\$48.32	\$48.32
1400	\$25.77	\$25.77	\$48.32	\$48.32
1500	\$25.77	\$25.77	\$48.32	\$48.32
1600	\$25.77	\$25.77	\$48.32	\$48.32
1700	\$25.77	\$25.77	\$48.32	\$48.32
1800	\$25.77	\$25.77	\$48.32	\$48.32
1900	\$25.77	\$25.77	\$48.32	\$48.32
2000	\$25.77	\$25.77	\$48.32	\$48.32
2100	\$25.77	\$25.77	\$48.32	\$48.32
2200	\$25.77	\$25.77	\$48.32	\$48.32
2300	\$25.77	\$25.77	\$48.32	\$48.32
2400	\$25.77	\$25.77	\$48.32	\$48.32
2500	\$25.77	\$25.77	\$48.32	\$48.32

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 1

Poverty Level = 50%

Usage/Mo (KW h)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R-H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$28.63	\$28.63	\$31.47	\$31.47
700	\$28.63	\$28.63	\$37.06	\$33.89
800	\$28.63	\$28.63	\$42.66	\$36.31
900	\$28.63	\$28.63	\$48.25	\$38.73
1000	\$28.63	\$28.63	\$53.69	\$41.15
1100	\$28.63	\$28.63	\$53.69	\$43.57
1200	\$28.63	\$28.63	\$53.69	\$45.99
1300	\$28.63	\$28.63	\$53.69	\$48.41
1400	\$28.63	\$28.63	\$53.69	\$50.83
1500	\$28.63	\$28.63	\$53.69	\$53.25
1600	\$28.63	\$28.63	\$53.69	\$53.69
1700	\$28.63	\$28.63	\$53.69	\$53.69
1800	\$28.63	\$28.63	\$53.69	\$53.69
1900	\$28.63	\$28.63	\$53.69	\$53.69
2000	\$28.63	\$28.63	\$53.69	\$53.69
2100	\$28.63	\$28.63	\$53.69	\$53.69
2200	\$28.63	\$28.63	\$53.69	\$53.69
2300	\$28.63	\$28.63	\$53.69	\$53.69
2400	\$28.63	\$28.63	\$53.69	\$53.69
2500	\$28.63	\$28.63	\$53.69	\$53.69

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 2

Poverty Level 15% or Less

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R H Summer	POB/PIPP Rate R H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$12.00	\$12.00	\$30.00	\$30.00
400	\$12.00	\$12.00	\$30.00	\$30.00
500	\$12.00	\$12.00	\$30.00	\$30.00
600	\$12.00	\$12.00	\$30.00	\$30.00
700	\$12.00	\$12.00	\$30.00	\$30.00
800	\$12.00	\$12.00	\$30.00	\$30.00
900	\$12.00	\$12.00	\$30.00	\$30.00
1000	\$12.00	\$12.00	\$30.00	\$30.00
1100	\$12.00	\$12.00	\$30.00	\$30.00
1200	\$12.00	\$12.00	\$30.00	\$30.00
1300	\$12.00	\$12.00	\$30.00	\$30.00
1400	\$12.00	\$12.00	\$30.00	\$30.00
1500	\$12.00	\$12.00	\$30.00	\$30.00
1600	\$12.00	\$12.00	\$30.00	\$30.00
1700	\$12.00	\$12.00	\$30.00	\$30.00
1800	\$12.00	\$12.00	\$30.00	\$30.00
1900	\$12.00	\$12.00	\$30.00	\$30.00
2000	\$12.00	\$12.00	\$30.00	\$30.00
2100	\$12.00	\$12.00	\$30.00	\$30.00
2200	\$12.00	\$12.00	\$30.00	\$30.00
2300	\$12.00	\$12.00	\$30.00	\$30.00
2400	\$12.00	\$12.00	\$30.00	\$30.00
2500	\$12.00	\$12.00	\$30.00	\$30.00

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 2

Poverty Level 20%

Usage/Mo (KW h)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R- H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$15.48	\$15.48	\$30.00	\$30.00
400	\$15.48	\$15.48	\$30.00	\$30.00
500	\$15.48	\$15.48	\$30.00	\$30.00
600	\$15.48	\$15.48	\$30.00	\$30.00
700	\$15.48	\$15.48	\$30.00	\$30.00
800	\$15.48	\$15.48	\$30.00	\$30.00
900	\$15.48	\$15.48	\$30.00	\$30.00
1000	\$15.48	\$15.48	\$30.00	\$30.00
1100	\$15.48	\$15.48	\$30.00	\$30.00
1200	\$15.48	\$15.48	\$30.00	\$30.00
1300	\$15.48	\$15.48	\$30.00	\$30.00
1400	\$15.48	\$15.48	\$30.00	\$30.00
1500	\$15.48	\$15.48	\$30.00	\$30.00
1600	\$15.48	\$15.48	\$30.00	\$30.00
1700	\$15.48	\$15.48	\$30.00	\$30.00
1800	\$15.48	\$15.48	\$30.00	\$30.00
1900	\$15.48	\$15.48	\$30.00	\$30.00
2000	\$15.48	\$15.48	\$30.00	\$30.00
2100	\$15.48	\$15.48	\$30.00	\$30.00
2200	\$15.48	\$15.48	\$30.00	\$30.00
2300	\$15.48	\$15.48	\$30.00	\$30.00
2400	\$15.48	\$15.48	\$30.00	\$30.00
2500	\$15.48	\$15.48	\$30.00	\$30.00

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 2

Poverty Level = 25%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R-H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$19.35	\$19.35	\$30.00	\$30.00
500	\$19.35	\$19.35	\$30.00	\$30.00
600	\$19.35	\$19.35	\$31.47	\$31.47
700	\$19.35	\$19.35	\$36.28	\$33.89
800	\$19.35	\$19.35	\$36.28	\$36.28
900	\$19.35	\$19.35	\$36.28	\$36.28
1000	\$19.35	\$19.35	\$36.28	\$36.28
1100	\$19.35	\$19.35	\$36.28	\$36.28
1200	\$19.35	\$19.35	\$36.28	\$36.28
1300	\$19.35	\$19.35	\$36.28	\$36.28
1400	\$19.35	\$19.35	\$36.28	\$36.28
1500	\$19.35	\$19.35	\$36.28	\$36.28
1600	\$19.35	\$19.35	\$36.28	\$36.28
1700	\$19.35	\$19.35	\$36.28	\$36.28
1800	\$19.35	\$19.35	\$36.28	\$36.28
1900	\$19.35	\$19.35	\$36.28	\$36.28
2000	\$19.35	\$19.35	\$36.28	\$36.28
2100	\$19.35	\$19.35	\$36.28	\$36.28
2200	\$19.35	\$19.35	\$36.28	\$36.28
2300	\$19.35	\$19.35	\$36.28	\$36.28
2400	\$19.35	\$19.35	\$36.28	\$36.28
2500	\$19.35	\$19.35	\$36.28	\$36.28

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 2

Poverty Level = 30%

Usage/Mo (KW h)	POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R	
	Summer	Winter	R-H Summer	H Winter		
100	\$12.00	\$12.00	\$30.00	\$30.00		
200	\$12.00	\$12.00	\$30.00	\$30.00		
300	\$16.80	\$16.80	\$30.00	\$30.00		
400	\$21.71	\$21.71	\$30.00	\$30.00		
500	\$23.22	\$23.22	\$30.00	\$30.00		
600	\$23.22	\$23.22	\$31.47	\$31.47		
700	\$23.22	\$23.22	\$37.06	\$33.89		
800	\$23.22	\$23.22	\$42.66	\$36.31		
900	\$23.22	\$23.22	\$43.54	\$38.73		
1000	\$23.22	\$23.22	\$43.54	\$41.15		
1100	\$23.22	\$23.22	\$43.54	\$43.54		
1200	\$23.22	\$23.22	\$43.54	\$43.54		
1300	\$23.22	\$23.22	\$43.54	\$43.54		
1400	\$23.22	\$23.22	\$43.54	\$43.54		
1500	\$23.22	\$23.22	\$43.54	\$43.54		
1600	\$23.22	\$23.22	\$43.54	\$43.54		
1700	\$23.22	\$23.22	\$43.54	\$43.54		
1800	\$23.22	\$23.22	\$43.54	\$43.54		
1900	\$23.22	\$23.22	\$43.54	\$43.54		
2000	\$23.22	\$23.22	\$43.54	\$43.54		
2100	\$23.22	\$23.22	\$43.54	\$43.54		
2200	\$23.22	\$23.22	\$43.54	\$43.54		
2300	\$23.22	\$23.22	\$43.54	\$43.54		
2400	\$23.22	\$23.22	\$43.54	\$43.54		
2500	\$23.22	\$23.22	\$43.54	\$43.54		

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 2

Poverty Level = 35%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$27.09	\$27.09	\$31.47	\$31.47
700	\$27.09	\$27.09	\$37.06	\$33.89
800	\$27.09	\$27.09	\$42.66	\$36.31
900	\$27.09	\$27.09	\$48.25	\$38.73
1000	\$27.09	\$27.09	\$50.79	\$41.15
1100	\$27.09	\$27.09	\$50.79	\$43.57
1200	\$27.09	\$27.09	\$50.79	\$45.99
1300	\$27.09	\$27.09	\$50.79	\$48.41
1400	\$27.09	\$27.09	\$50.79	\$50.79
1500	\$27.09	\$27.09	\$50.79	\$50.79
1600	\$27.09	\$27.09	\$50.79	\$50.79
1700	\$27.09	\$27.09	\$50.79	\$50.79
1800	\$27.09	\$27.09	\$50.79	\$50.79
1900	\$27.09	\$27.09	\$50.79	\$50.79
2000	\$27.09	\$27.09	\$50.79	\$50.79
2100	\$27.09	\$27.09	\$50.79	\$50.79
2200	\$27.09	\$27.09	\$50.79	\$50.79
2300	\$27.09	\$27.09	\$50.79	\$50.79
2400	\$27.09	\$27.09	\$50.79	\$50.79
2500	\$27.09	\$27.09	\$50.79	\$50.79

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 2

Poverty Level = 40%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R H Summer	POB/PIPP Rate R R-H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$30.96	\$30.96	\$31.47	\$31.47
700	\$30.96	\$30.96	\$37.06	\$33.89
800	\$30.96	\$30.96	\$42.66	\$36.31
900	\$30.96	\$30.96	\$48.25	\$38.73
1000	\$30.96	\$30.96	\$58.05	\$41.15
1100	\$30.96	\$30.96	\$58.05	\$43.57
1200	\$30.96	\$30.96	\$58.05	\$45.99
1300	\$30.96	\$30.96	\$58.05	\$48.41
1400	\$30.96	\$30.96	\$58.05	\$50.83
1500	\$30.96	\$30.96	\$58.05	\$53.25
1600	\$30.96	\$30.96	\$58.05	\$55.67
1700	\$30.96	\$30.96	\$58.05	\$58.05
1800	\$30.96	\$30.96	\$58.05	\$58.05
1900	\$30.96	\$30.96	\$58.05	\$58.05
2000	\$30.96	\$30.96	\$58.05	\$58.05
2100	\$30.96	\$30.96	\$58.05	\$58.05
2200	\$30.96	\$30.96	\$58.05	\$58.05
2300	\$30.96	\$30.96	\$58.05	\$58.05
2400	\$30.96	\$30.96	\$58.05	\$58.05
2500	\$30.96	\$30.96	\$58.05	\$58.05

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 2

Poverty Level = 45%

Usage/Mo (KW h)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R-H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$34.83	\$34.83	\$37.06	\$33.89
800	\$34.83	\$34.83	\$42.66	\$36.31
900	\$34.83	\$34.83	\$48.25	\$38.73
1000	\$34.83	\$34.83	\$53.84	\$41.15
1100	\$34.83	\$34.83	\$59.43	\$43.57
1200	\$34.83	\$34.83	\$65.02	\$45.99
1300	\$34.83	\$34.83	\$65.31	\$48.41
1400	\$34.83	\$34.83	\$65.31	\$50.83
1500	\$34.83	\$34.83	\$65.31	\$53.25
1600	\$34.83	\$34.83	\$65.31	\$55.67
1700	\$34.83	\$34.83	\$65.31	\$58.09
1800	\$34.83	\$34.83	\$65.31	\$60.51
1900	\$34.83	\$34.83	\$65.31	\$62.93
2000	\$34.83	\$34.83	\$65.31	\$65.31
2100	\$34.83	\$34.83	\$65.31	\$65.31
2200	\$34.83	\$34.83	\$65.31	\$65.31
2300	\$34.83	\$34.83	\$65.31	\$65.31
2400	\$34.83	\$34.83	\$65.31	\$65.31
2500	\$34.83	\$34.83	\$65.31	\$65.31

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 2

Poverty Level = 50%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R- H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$37.77	\$36.46	\$37.06	\$33.89
800	\$38.70	\$38.70	\$42.66	\$36.31
900	\$38.70	\$38.70	\$48.25	\$38.73
1000	\$38.70	\$38.70	\$53.84	\$41.15
1100	\$38.70	\$38.70	\$59.43	\$43.57
1200	\$38.70	\$38.70	\$65.02	\$45.99
1300	\$38.70	\$38.70	\$70.62	\$48.41
1400	\$38.70	\$38.70	\$72.56	\$50.83
1500	\$38.70	\$38.70	\$72.56	\$53.25
1600	\$38.70	\$38.70	\$72.56	\$55.67
1700	\$38.70	\$38.70	\$72.56	\$58.09
1800	\$38.70	\$38.70	\$72.56	\$60.51
1900	\$38.70	\$38.70	\$72.56	\$62.93
2000	\$38.70	\$38.70	\$72.56	\$65.35
2100	\$38.70	\$38.70	\$72.56	\$67.77
2200	\$38.70	\$38.70	\$72.56	\$70.19
2300	\$38.70	\$38.70	\$72.56	\$72.56
2400	\$38.70	\$38.70	\$72.56	\$72.56
2500	\$38.70	\$38.70	\$72.56	\$72.56

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 3

Poverty Level = 10% or Less

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R H Summer	POB/PIPP Rate R H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$12.00	\$12.00	\$30.00	\$30.00
400	\$12.00	\$12.00	\$30.00	\$30.00
500	\$12.00	\$12.00	\$30.00	\$30.00
600	\$12.00	\$12.00	\$30.00	\$30.00
700	\$12.00	\$12.00	\$30.00	\$30.00
800	\$12.00	\$12.00	\$30.00	\$30.00
900	\$12.00	\$12.00	\$30.00	\$30.00
1000	\$12.00	\$12.00	\$30.00	\$30.00
1100	\$12.00	\$12.00	\$30.00	\$30.00
1200	\$12.00	\$12.00	\$30.00	\$30.00
1300	\$12.00	\$12.00	\$30.00	\$30.00
1400	\$12.00	\$12.00	\$30.00	\$30.00
1500	\$12.00	\$12.00	\$30.00	\$30.00
1600	\$12.00	\$12.00	\$30.00	\$30.00
1700	\$12.00	\$12.00	\$30.00	\$30.00
1800	\$12.00	\$12.00	\$30.00	\$30.00
1900	\$12.00	\$12.00	\$30.00	\$30.00
2000	\$12.00	\$12.00	\$30.00	\$30.00
2100	\$12.00	\$12.00	\$30.00	\$30.00
2200	\$12.00	\$12.00	\$30.00	\$30.00
2300	\$12.00	\$12.00	\$30.00	\$30.00
2400	\$12.00	\$12.00	\$30.00	\$30.00
2500	\$12.00	\$12.00	\$30.00	\$30.00

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 3

Poverty Level = 15%

Usage/Mo (KW h)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R- H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$14.63	\$14.63	\$30.00	\$30.00
400	\$14.63	\$14.63	\$30.00	\$30.00
500	\$14.63	\$14.63	\$30.00	\$30.00
600	\$14.63	\$14.63	\$30.00	\$30.00
700	\$14.63	\$14.63	\$30.00	\$30.00
800	\$14.63	\$14.63	\$30.00	\$30.00
900	\$14.63	\$14.63	\$30.00	\$30.00
1000	\$14.63	\$14.63	\$30.00	\$30.00
1100	\$14.63	\$14.63	\$30.00	\$30.00
1200	\$14.63	\$14.63	\$30.00	\$30.00
1300	\$14.63	\$14.63	\$30.00	\$30.00
1400	\$14.63	\$14.63	\$30.00	\$30.00
1500	\$14.63	\$14.63	\$30.00	\$30.00
1600	\$14.63	\$14.63	\$30.00	\$30.00
1700	\$14.63	\$14.63	\$30.00	\$30.00
1800	\$14.63	\$14.63	\$30.00	\$30.00
1900	\$14.63	\$14.63	\$30.00	\$30.00
2000	\$14.63	\$14.63	\$30.00	\$30.00
2100	\$14.63	\$14.63	\$30.00	\$30.00
2200	\$14.63	\$14.63	\$30.00	\$30.00
2300	\$14.63	\$14.63	\$30.00	\$30.00
2400	\$14.63	\$14.63	\$30.00	\$30.00
2500	\$14.63	\$14.63	\$30.00	\$30.00

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 3

Poverty Level = 20%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R-H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$19.51	\$19.51	\$30.00	\$30.00
500	\$19.51	\$19.51	\$30.00	\$30.00
600	\$19.51	\$19.51	\$31.47	\$31.47
700	\$19.51	\$19.51	\$36.58	\$33.89
800	\$19.51	\$19.51	\$36.58	\$36.31
900	\$19.51	\$19.51	\$36.58	\$36.58
1000	\$19.51	\$19.51	\$36.58	\$36.58
1100	\$19.51	\$19.51	\$36.58	\$36.58
1200	\$19.51	\$19.51	\$36.58	\$36.58
1300	\$19.51	\$19.51	\$36.58	\$36.58
1400	\$19.51	\$19.51	\$36.58	\$36.58
1500	\$19.51	\$19.51	\$36.58	\$36.58
1600	\$19.51	\$19.51	\$36.58	\$36.58
1700	\$19.51	\$19.51	\$36.58	\$36.58
1800	\$19.51	\$19.51	\$36.58	\$36.58
1900	\$19.51	\$19.51	\$36.58	\$36.58
2000	\$19.51	\$19.51	\$36.58	\$36.58
2100	\$19.51	\$19.51	\$36.58	\$36.58
2200	\$19.51	\$19.51	\$36.58	\$36.58
2300	\$19.51	\$19.51	\$36.58	\$36.58
2400	\$19.51	\$19.51	\$36.58	\$36.58
2500	\$19.51	\$19.51	\$36.58	\$36.58

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 3

Poverty Level = 25%

Usage/Mo (KW h)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R R-H Summer	POB/PIPP Rate R H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$24.38	\$24.38	\$30.00	\$30.00
600	\$24.38	\$24.38	\$31.47	\$31.47
700	\$24.38	\$24.38	\$37.06	\$33.89
800	\$24.38	\$24.38	\$45.72	\$36.31
900	\$24.38	\$24.38	\$45.72	\$38.73
1000	\$24.38	\$24.38	\$45.72	\$41.15
1100	\$24.38	\$24.38	\$45.72	\$43.57
1200	\$24.38	\$24.38	\$45.72	\$45.72
1300	\$24.38	\$24.38	\$45.72	\$45.72
1400	\$24.38	\$24.38	\$45.72	\$45.72
1500	\$24.38	\$24.38	\$45.72	\$45.72
1600	\$24.38	\$24.38	\$45.72	\$45.72
1700	\$24.38	\$24.38	\$45.72	\$45.72
1800	\$24.38	\$24.38	\$45.72	\$45.72
1900	\$24.38	\$24.38	\$45.72	\$45.72
2000	\$24.38	\$24.38	\$45.72	\$45.72
2100	\$24.38	\$24.38	\$45.72	\$45.72
2200	\$24.38	\$24.38	\$45.72	\$45.72
2300	\$24.38	\$24.38	\$45.72	\$45.72
2400	\$24.38	\$24.38	\$45.72	\$45.72
2500	\$24.38	\$24.38	\$45.72	\$45.72

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 3

Poverty Level = 30%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$29.26	\$29.26	\$31.47	\$31.47
700	\$29.26	\$29.26	\$37.06	\$33.89
800	\$29.26	\$29.26	\$42.66	\$36.31
900	\$29.26	\$29.26	\$48.25	\$38.73
1000	\$29.26	\$29.26	\$53.84	\$41.15
1100	\$29.26	\$29.26	\$54.86	\$43.57
1200	\$29.26	\$29.26	\$54.86	\$45.99
1300	\$29.26	\$29.26	\$54.86	\$48.41
1400	\$29.26	\$29.26	\$54.86	\$50.83
1500	\$29.26	\$29.26	\$54.86	\$53.25
1600	\$29.26	\$29.26	\$54.86	\$54.86
1700	\$29.26	\$29.26	\$54.86	\$54.86
1800	\$29.26	\$29.26	\$54.86	\$54.86
1900	\$29.26	\$29.26	\$54.86	\$54.86
2000	\$29.26	\$29.26	\$54.86	\$54.86
2100	\$29.26	\$29.26	\$54.86	\$54.86
2200	\$29.26	\$29.26	\$54.86	\$54.86
2300	\$29.26	\$29.26	\$54.86	\$54.86
2400	\$29.26	\$29.26	\$54.86	\$54.86
2500	\$29.26	\$29.26	\$54.86	\$54.86

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 3

Poverty Level 35%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R H Summer	POB/PIPP Rate R R-H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$34.14	\$34.14	\$37.06	\$33.89
800	\$34.14	\$34.14	\$42.66	\$36.31
900	\$34.14	\$34.14	\$48.25	\$38.73
1000	\$34.14	\$34.14	\$53.84	\$41.15
1100	\$34.14	\$34.14	\$59.43	\$43.57
1200	\$34.14	\$34.14	\$64.01	\$45.99
1300	\$34.14	\$34.14	\$64.01	\$48.41
1400	\$34.14	\$34.14	\$64.01	\$50.83
1500	\$34.14	\$34.14	\$64.01	\$53.25
1600	\$34.14	\$34.14	\$64.01	\$55.67
1700	\$34.14	\$34.14	\$64.01	\$58.09
1800	\$34.14	\$34.14	\$64.01	\$60.51
1900	\$34.14	\$34.14	\$64.01	\$62.93
2000	\$34.14	\$34.14	\$64.01	\$64.01
2100	\$34.14	\$34.14	\$64.01	\$64.01
2200	\$34.14	\$34.14	\$64.01	\$64.01
2300	\$34.14	\$34.14	\$64.01	\$64.01
2400	\$34.14	\$34.14	\$64.01	\$64.01
2500	\$34.14	\$34.14	\$64.01	\$64.01

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 3

Poverty Level 40%

Usage/Mo (KW h)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R-H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$37.77	\$36.46	\$37.06	\$33.89
800	\$39.01	\$39.01	\$42.66	\$36.31
900	\$39.01	\$39.01	\$48.25	\$38.73
1000	\$39.01	\$39.01	\$53.84	\$41.15
1100	\$39.01	\$39.01	\$59.43	\$43.57
1200	\$39.01	\$39.01	\$65.02	\$45.99
1300	\$39.01	\$39.01	\$70.62	\$48.41
1400	\$39.01	\$39.01	\$73.15	\$50.83
1500	\$39.01	\$39.01	\$73.15	\$53.25
1600	\$39.01	\$39.01	\$73.15	\$55.67
1700	\$39.01	\$39.01	\$73.15	\$58.09
1800	\$39.01	\$39.01	\$73.15	\$60.51
1900	\$39.01	\$39.01	\$73.15	\$62.93
2000	\$39.01	\$39.01	\$73.15	\$65.35
2100	\$39.01	\$39.01	\$73.15	\$67.77
2200	\$39.01	\$39.01	\$73.15	\$70.19
2300	\$39.01	\$39.01	\$73.15	\$72.61
2400	\$39.01	\$39.01	\$73.15	\$73.15
2500	\$39.01	\$39.01	\$73.15	\$73.15

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 3

Poverty Level 45%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R- H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$37.77	\$36.46	\$37.06	\$33.89
800	\$43.34	\$41.38	\$42.66	\$36.31
900	\$43.89	\$43.89	\$48.25	\$38.73
1000	\$43.89	\$43.89	\$53.84	\$41.15
1100	\$43.89	\$43.89	\$59.43	\$43.57
1200	\$43.89	\$43.89	\$65.02	\$45.99
1300	\$43.89	\$43.89	\$70.62	\$48.41
1400	\$43.89	\$43.89	\$76.21	\$50.83
1500	\$43.89	\$43.89	\$81.80	\$53.25
1600	\$43.89	\$43.89	\$82.29	\$55.67
1700	\$43.89	\$43.89	\$82.29	\$58.09
1800	\$43.89	\$43.89	\$82.29	\$60.51
1900	\$43.89	\$43.89	\$82.29	\$62.93
2000	\$43.89	\$43.89	\$82.29	\$65.35
2100	\$43.89	\$43.89	\$82.29	\$67.77
2200	\$43.89	\$43.89	\$82.29	\$70.19
2300	\$43.89	\$43.89	\$82.29	\$72.61
2400	\$43.89	\$43.89	\$82.29	\$75.03
2500	\$43.89	\$43.89	\$82.29	\$77.45

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 3

Poverty Level 50%

Usage/Mo (KW h)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R- H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$37.77	\$36.46	\$37.06	\$33.89
800	\$43.34	\$41.38	\$42.66	\$36.31
900	\$48.77	\$46.29	\$48.25	\$38.73
1000	\$48.77	\$48.77	\$53.84	\$41.15
1100	\$48.77	\$48.77	\$59.43	\$43.57
1200	\$48.77	\$48.77	\$65.02	\$45.99
1300	\$48.77	\$48.77	\$70.62	\$48.41
1400	\$48.77	\$48.77	\$76.21	\$50.83
1500	\$48.77	\$48.77	\$81.80	\$53.25
1600	\$48.77	\$48.77	\$87.39	\$55.67
1700	\$48.77	\$48.77	\$91.44	\$58.09
1800	\$48.77	\$48.77	\$91.44	\$60.51
1900	\$48.77	\$48.77	\$91.44	\$62.93
2000	\$48.77	\$48.77	\$91.44	\$65.35
2100	\$48.77	\$48.77	\$91.44	\$67.77
2200	\$48.77	\$48.77	\$91.44	\$70.19
2300	\$48.77	\$48.77	\$91.44	\$72.61
2400	\$48.77	\$48.77	\$91.44	\$75.03
2500	\$48.77	\$48.77	\$91.44	\$77.45

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 4

Poverty Level = 10% or Less

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R H Summer	POB/PIPP Rate R H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$12.00	\$12.00	\$30.00	\$30.00
400	\$12.00	\$12.00	\$30.00	\$30.00
500	\$12.00	\$12.00	\$30.00	\$30.00
600	\$12.00	\$12.00	\$30.00	\$30.00
700	\$12.00	\$12.00	\$30.00	\$30.00
800	\$12.00	\$12.00	\$30.00	\$30.00
900	\$12.00	\$12.00	\$30.00	\$30.00
1000	\$12.00	\$12.00	\$30.00	\$30.00
1100	\$12.00	\$12.00	\$30.00	\$30.00
1200	\$12.00	\$12.00	\$30.00	\$30.00
1300	\$12.00	\$12.00	\$30.00	\$30.00
1400	\$12.00	\$12.00	\$30.00	\$30.00
1500	\$12.00	\$12.00	\$30.00	\$30.00
1600	\$12.00	\$12.00	\$30.00	\$30.00
1700	\$12.00	\$12.00	\$30.00	\$30.00
1800	\$12.00	\$12.00	\$30.00	\$30.00
1900	\$12.00	\$12.00	\$30.00	\$30.00
2000	\$12.00	\$12.00	\$30.00	\$30.00
2100	\$12.00	\$12.00	\$30.00	\$30.00
2200	\$12.00	\$12.00	\$30.00	\$30.00
2300	\$12.00	\$12.00	\$30.00	\$30.00
2400	\$12.00	\$12.00	\$30.00	\$30.00
2500	\$12.00	\$12.00	\$30.00	\$30.00

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 4

Poverty Level = 15%

Usage/Mo (KW h)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R- H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$17.65	\$17.65	\$30.00	\$30.00
500	\$17.65	\$17.65	\$30.00	\$30.00
600	\$17.65	\$17.65	\$31.47	\$31.47
700	\$17.65	\$17.65	\$33.09	\$33.09
800	\$17.65	\$17.65	\$33.09	\$33.09
900	\$17.65	\$17.65	\$33.09	\$33.09
1000	\$17.65	\$17.65	\$33.09	\$33.09
1100	\$17.65	\$17.65	\$33.09	\$33.09
1200	\$17.65	\$17.65	\$33.09	\$33.09
1300	\$17.65	\$17.65	\$33.09	\$33.09
1400	\$17.65	\$17.65	\$33.09	\$33.09
1500	\$17.65	\$17.65	\$33.09	\$33.09
1600	\$17.65	\$17.65	\$33.09	\$33.09
1700	\$17.65	\$17.65	\$33.09	\$33.09
1800	\$17.65	\$17.65	\$33.09	\$33.09
1900	\$17.65	\$17.65	\$33.09	\$33.09
2000	\$17.65	\$17.65	\$33.09	\$33.09
2100	\$17.65	\$17.65	\$33.09	\$33.09
2200	\$17.65	\$17.65	\$33.09	\$33.09
2300	\$17.65	\$17.65	\$33.09	\$33.09
2400	\$17.65	\$17.65	\$33.09	\$33.09
2500	\$17.65	\$17.65	\$33.09	\$33.09

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 4

Poverty Level = 20%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R-H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$23.53	\$23.53	\$30.00	\$30.00
600	\$23.53	\$23.53	\$31.47	\$31.47
700	\$23.53	\$23.53	\$37.06	\$33.89
800	\$23.53	\$23.53	\$42.66	\$36.31
900	\$23.53	\$23.53	\$44.13	\$38.73
1000	\$23.53	\$23.53	\$44.13	\$41.15
1100	\$23.53	\$23.53	\$44.13	\$43.57
1200	\$23.53	\$23.53	\$44.13	\$44.13
1300	\$23.53	\$23.53	\$44.13	\$44.13
1400	\$23.53	\$23.53	\$44.13	\$44.13
1500	\$23.53	\$23.53	\$44.13	\$44.13
1600	\$23.53	\$23.53	\$44.13	\$44.13
1700	\$23.53	\$23.53	\$44.13	\$44.13
1800	\$23.53	\$23.53	\$44.13	\$44.13
1900	\$23.53	\$23.53	\$44.13	\$44.13
2000	\$23.53	\$23.53	\$44.13	\$44.13
2100	\$23.53	\$23.53	\$44.13	\$44.13
2200	\$23.53	\$23.53	\$44.13	\$44.13
2300	\$23.53	\$23.53	\$44.13	\$44.13
2400	\$23.53	\$23.53	\$44.13	\$44.13
2500	\$23.53	\$23.53	\$44.13	\$44.13

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 4

Poverty Level = 25%

Usage/Mo (KW h)	POB/PIPP Rate R	POB/PIPP Rate R	POB/PIPP Rate	POB/PIPP Rate R
	Summer	Winter	R-H Summer	H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$29.42	\$29.42	\$31.47	\$31.47
700	\$29.42	\$29.42	\$37.06	\$33.89
800	\$29.42	\$29.42	\$42.66	\$36.31
900	\$29.42	\$29.42	\$48.25	\$38.73
1000	\$29.42	\$29.42	\$53.84	\$41.15
1100	\$29.42	\$29.42	\$55.16	\$43.57
1200	\$29.42	\$29.42	\$55.16	\$45.99
1300	\$29.42	\$29.42	\$55.16	\$48.41
1400	\$29.42	\$29.42	\$55.16	\$50.83
1500	\$29.42	\$29.42	\$55.16	\$53.25
1600	\$29.42	\$29.42	\$55.16	\$55.16
1700	\$29.42	\$29.42	\$55.16	\$55.16
1800	\$29.42	\$29.42	\$55.16	\$55.16
1900	\$29.42	\$29.42	\$55.16	\$55.16
2000	\$29.42	\$29.42	\$55.16	\$55.16
2100	\$29.42	\$29.42	\$55.16	\$55.16
2200	\$29.42	\$29.42	\$55.16	\$55.16
2300	\$29.42	\$29.42	\$55.16	\$55.16
2400	\$29.42	\$29.42	\$55.16	\$55.16
2500	\$29.42	\$29.42	\$55.16	\$55.16

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 4

Poverty Level = 30%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$35.30	\$35.30	\$37.06	\$33.89
800	\$35.30	\$35.30	\$42.66	\$36.31
900	\$35.30	\$35.30	\$48.25	\$38.73
1000	\$35.30	\$35.30	\$53.84	\$41.15
1100	\$35.30	\$35.30	\$59.43	\$43.57
1200	\$35.30	\$35.30	\$65.02	\$45.99
1300	\$35.30	\$35.30	\$66.19	\$48.41
1400	\$35.30	\$35.30	\$66.19	\$50.83
1500	\$35.30	\$35.30	\$66.19	\$53.25
1600	\$35.30	\$35.30	\$66.19	\$55.67
1700	\$35.30	\$35.30	\$66.19	\$58.09
1800	\$35.30	\$35.30	\$66.19	\$60.51
1900	\$35.30	\$35.30	\$66.19	\$62.93
2000	\$35.30	\$35.30	\$66.19	\$65.35
2100	\$35.30	\$35.30	\$66.19	\$66.19
2200	\$35.30	\$35.30	\$66.19	\$66.19
2300	\$35.30	\$35.30	\$66.19	\$66.19
2400	\$35.30	\$35.30	\$66.19	\$66.19
2500	\$35.30	\$35.30	\$66.19	\$66.19

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 4

Poverty Level = 35%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R H Summer	POB/PIPP Rate R R-H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$37.77	\$36.46	\$37.06	\$33.89
800	\$41.18	\$41.18	\$42.66	\$36.31
900	\$41.18	\$41.18	\$48.25	\$38.73
1000	\$41.18	\$41.18	\$53.84	\$41.15
1100	\$41.18	\$41.18	\$59.43	\$43.57
1200	\$41.18	\$41.18	\$65.02	\$45.99
1300	\$41.18	\$41.18	\$70.62	\$48.41
1400	\$41.18	\$41.18	\$77.22	\$50.83
1500	\$41.18	\$41.18	\$77.22	\$53.25
1600	\$41.18	\$41.18	\$77.22	\$55.67
1700	\$41.18	\$41.18	\$77.22	\$58.09
1800	\$41.18	\$41.18	\$77.22	\$60.51
1900	\$41.18	\$41.18	\$77.22	\$62.93
2000	\$41.18	\$41.18	\$77.22	\$65.35
2100	\$41.18	\$41.18	\$77.22	\$67.77
2200	\$41.18	\$41.18	\$77.22	\$70.19
2300	\$41.18	\$41.18	\$77.22	\$72.61
2400	\$41.18	\$41.18	\$77.22	\$75.03
2500	\$41.18	\$41.18	\$77.22	\$77.22

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 4

Poverty Level = 40%

Usage/Mo (KW h)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R-H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$37.77	\$36.46	\$37.06	\$33.89
800	\$43.34	\$41.38	\$42.66	\$36.31
900	\$47.07	\$46.29	\$48.25	\$38.73
1000	\$47.07	\$47.07	\$53.84	\$41.15
1100	\$47.07	\$47.07	\$59.43	\$43.57
1200	\$47.07	\$47.07	\$65.02	\$45.99
1300	\$47.07	\$47.07	\$70.62	\$48.41
1400	\$47.07	\$47.07	\$76.21	\$50.83
1500	\$47.07	\$47.07	\$81.80	\$53.25
1600	\$47.07	\$47.07	\$87.39	\$55.67
1700	\$47.07	\$47.07	\$88.25	\$58.09
1800	\$47.07	\$47.07	\$88.25	\$60.51
1900	\$47.07	\$47.07	\$88.25	\$62.93
2000	\$47.07	\$47.07	\$88.25	\$65.35
2100	\$47.07	\$47.07	\$88.25	\$67.77
2200	\$47.07	\$47.07	\$88.25	\$70.19
2300	\$47.07	\$47.07	\$88.25	\$72.61
2400	\$47.07	\$47.07	\$88.25	\$75.03
2500	\$47.07	\$47.07	\$88.25	\$77.45

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 4

Poverty Level = 45%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R- H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$37.77	\$36.46	\$37.06	\$33.89
800	\$43.34	\$41.38	\$42.66	\$36.31
900	\$48.92	\$46.29	\$48.25	\$38.73
1000	\$52.95	\$51.21	\$53.84	\$41.15
1100	\$52.95	\$52.95	\$59.43	\$43.57
1200	\$52.95	\$52.95	\$65.02	\$45.99
1300	\$52.95	\$52.95	\$70.62	\$48.41
1400	\$52.95	\$52.95	\$76.21	\$50.83
1500	\$52.95	\$52.95	\$81.80	\$53.25
1600	\$52.95	\$52.95	\$87.39	\$55.67
1700	\$52.95	\$52.95	\$92.98	\$58.09
1800	\$52.95	\$52.95	\$98.58	\$60.51
1900	\$52.95	\$52.95	\$99.28	\$62.93
2000	\$52.95	\$52.95	\$99.28	\$65.35
2100	\$52.95	\$52.95	\$99.28	\$67.77
2200	\$52.95	\$52.95	\$99.28	\$70.19
2300	\$52.95	\$52.95	\$99.28	\$72.61
2400	\$52.95	\$52.95	\$99.28	\$75.03
2500	\$52.95	\$52.95	\$99.28	\$77.45

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 4

Poverty Level = 50%

Usage/Mo (KW h)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R- H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$37.77	\$36.46	\$37.06	\$33.89
800	\$43.34	\$41.38	\$42.66	\$36.31
900	\$48.92	\$46.29	\$48.25	\$38.73
1000	\$54.49	\$51.21	\$53.84	\$41.15
1100	\$58.83	\$56.12	\$59.43	\$43.57
1200	\$58.83	\$58.83	\$65.02	\$45.99
1300	\$58.83	\$58.83	\$70.62	\$48.41
1400	\$58.83	\$58.83	\$76.21	\$50.83
1500	\$58.83	\$58.83	\$81.80	\$53.25
1600	\$58.83	\$58.83	\$87.39	\$55.67
1700	\$58.83	\$58.83	\$92.98	\$58.09
1800	\$58.83	\$58.83	\$98.58	\$60.51
1900	\$58.83	\$58.83	\$104.17	\$62.93
2000	\$58.83	\$58.83	\$109.76	\$65.35
2100	\$58.83	\$58.83	\$110.31	\$67.77
2200	\$58.83	\$58.83	\$110.31	\$70.19
2300	\$58.83	\$58.83	\$110.31	\$72.61
2400	\$58.83	\$58.83	\$110.31	\$75.03
2500	\$58.83	\$58.83	\$110.31	\$77.45

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 5

Poverty Level = 5%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R H Summer	POB/PIPP Rate R H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$12.00	\$12.00	\$30.00	\$30.00
400	\$12.00	\$12.00	\$30.00	\$30.00
500	\$12.00	\$12.00	\$30.00	\$30.00
600	\$12.00	\$12.00	\$30.00	\$30.00
700	\$12.00	\$12.00	\$30.00	\$30.00
800	\$12.00	\$12.00	\$30.00	\$30.00
900	\$12.00	\$12.00	\$30.00	\$30.00
1000	\$12.00	\$12.00	\$30.00	\$30.00
1100	\$12.00	\$12.00	\$30.00	\$30.00
1200	\$12.00	\$12.00	\$30.00	\$30.00
1300	\$12.00	\$12.00	\$30.00	\$30.00
1400	\$12.00	\$12.00	\$30.00	\$30.00
1500	\$12.00	\$12.00	\$30.00	\$30.00
1600	\$12.00	\$12.00	\$30.00	\$30.00
1700	\$12.00	\$12.00	\$30.00	\$30.00
1800	\$12.00	\$12.00	\$30.00	\$30.00
1900	\$12.00	\$12.00	\$30.00	\$30.00
2000	\$12.00	\$12.00	\$30.00	\$30.00
2100	\$12.00	\$12.00	\$30.00	\$30.00
2200	\$12.00	\$12.00	\$30.00	\$30.00
2300	\$12.00	\$12.00	\$30.00	\$30.00
2400	\$12.00	\$12.00	\$30.00	\$30.00
2500	\$12.00	\$12.00	\$30.00	\$30.00

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 5

Poverty Level = 10%

Usage/Mo (KW h)	POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R-H		POB/PIPP Rate R-	
	Summer		R Winter		Summer	H	Winter	
100		\$12.00		\$12.00		\$30.00		\$30.00
200		\$12.00		\$12.00		\$30.00		\$30.00
300		\$13.78		\$13.78		\$30.00		\$30.00
400		\$13.78		\$13.78		\$30.00		\$30.00
500		\$13.78		\$13.78		\$30.00		\$30.00
600		\$13.78		\$13.78		\$30.00		\$30.00
700		\$13.78		\$13.78		\$30.00		\$30.00
800		\$13.78		\$13.78		\$30.00		\$30.00
900		\$13.78		\$13.78		\$30.00		\$30.00
1000		\$13.78		\$13.78		\$30.00		\$30.00
1100		\$13.78		\$13.78		\$30.00		\$30.00
1200		\$13.78		\$13.78		\$30.00		\$30.00
1300		\$13.78		\$13.78		\$30.00		\$30.00
1400		\$13.78		\$13.78		\$30.00		\$30.00
1500		\$13.78		\$13.78		\$30.00		\$30.00
1600		\$13.78		\$13.78		\$30.00		\$30.00
1700		\$13.78		\$13.78		\$30.00		\$30.00
1800		\$13.78		\$13.78		\$30.00		\$30.00
1900		\$13.78		\$13.78		\$30.00		\$30.00
2000		\$13.78		\$13.78		\$30.00		\$30.00
2100		\$13.78		\$13.78		\$30.00		\$30.00
2200		\$13.78		\$13.78		\$30.00		\$30.00
2300		\$13.78		\$13.78		\$30.00		\$30.00
2400		\$13.78		\$13.78		\$30.00		\$30.00
2500		\$13.78		\$13.78		\$30.00		\$30.00

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 5

Poverty Level = 15%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R-H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$20.67	\$20.67	\$30.00	\$30.00
500	\$20.67	\$20.67	\$30.00	\$30.00
600	\$20.67	\$20.67	\$31.47	\$31.47
700	\$20.67	\$20.67	\$37.06	\$33.89
800	\$20.67	\$20.67	\$38.76	\$36.31
900	\$20.67	\$20.67	\$38.76	\$38.73
1000	\$20.67	\$20.67	\$38.76	\$38.76
1100	\$20.67	\$20.67	\$38.76	\$38.76
1200	\$20.67	\$20.67	\$38.76	\$38.76
1300	\$20.67	\$20.67	\$38.76	\$38.76
1400	\$20.67	\$20.67	\$38.76	\$38.76
1500	\$20.67	\$20.67	\$38.76	\$38.76
1600	\$20.67	\$20.67	\$38.76	\$38.76
1700	\$20.67	\$20.67	\$38.76	\$38.76
1800	\$20.67	\$20.67	\$38.76	\$38.76
1900	\$20.67	\$20.67	\$38.76	\$38.76
2000	\$20.67	\$20.67	\$38.76	\$38.76
2100	\$20.67	\$20.67	\$38.76	\$38.76
2200	\$20.67	\$20.67	\$38.76	\$38.76
2300	\$20.67	\$20.67	\$38.76	\$38.76
2400	\$20.67	\$20.67	\$38.76	\$38.76
2500	\$20.67	\$20.67	\$38.76	\$38.76

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 5

Poverty Level = 20%

Usage/Mo (KW h)	POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R	
	Summer	Winter	Summer	Winter	R-H Summer	H Winter	R-H Summer	H Winter
100	\$12.00	\$12.00	\$12.00	\$12.00	\$30.00	\$30.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$12.00	\$12.00	\$30.00	\$30.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$16.80	\$16.80	\$30.00	\$30.00	\$30.00	\$30.00
400	\$21.71	\$21.71	\$21.71	\$21.71	\$30.00	\$30.00	\$30.00	\$30.00
500	\$26.63	\$26.63	\$26.63	\$26.63	\$30.00	\$30.00	\$30.00	\$30.00
600	\$27.56	\$27.56	\$27.56	\$27.56	\$31.47	\$31.47	\$31.47	\$31.47
700	\$27.56	\$27.56	\$27.56	\$27.56	\$37.06	\$33.89	\$37.06	\$33.89
800	\$27.56	\$27.56	\$27.56	\$27.56	\$42.66	\$36.31	\$42.66	\$36.31
900	\$27.56	\$27.56	\$27.56	\$27.56	\$48.25	\$38.73	\$48.25	\$38.73
1000	\$27.56	\$27.56	\$27.56	\$27.56	\$51.68	\$41.15	\$51.68	\$41.15
1100	\$27.56	\$27.56	\$27.56	\$27.56	\$51.68	\$43.57	\$51.68	\$43.57
1200	\$27.56	\$27.56	\$27.56	\$27.56	\$51.68	\$45.99	\$51.68	\$45.99
1300	\$27.56	\$27.56	\$27.56	\$27.56	\$51.68	\$48.41	\$51.68	\$48.41
1400	\$27.56	\$27.56	\$27.56	\$27.56	\$51.68	\$50.83	\$51.68	\$50.83
1500	\$27.56	\$27.56	\$27.56	\$27.56	\$51.68	\$51.68	\$51.68	\$51.68
1600	\$27.56	\$27.56	\$27.56	\$27.56	\$51.68	\$51.68	\$51.68	\$51.68
1700	\$27.56	\$27.56	\$27.56	\$27.56	\$51.68	\$51.68	\$51.68	\$51.68
1800	\$27.56	\$27.56	\$27.56	\$27.56	\$51.68	\$51.68	\$51.68	\$51.68
1900	\$27.56	\$27.56	\$27.56	\$27.56	\$51.68	\$51.68	\$51.68	\$51.68
2000	\$27.56	\$27.56	\$27.56	\$27.56	\$51.68	\$51.68	\$51.68	\$51.68
2100	\$27.56	\$27.56	\$27.56	\$27.56	\$51.68	\$51.68	\$51.68	\$51.68
2200	\$27.56	\$27.56	\$27.56	\$27.56	\$51.68	\$51.68	\$51.68	\$51.68
2300	\$27.56	\$27.56	\$27.56	\$27.56	\$51.68	\$51.68	\$51.68	\$51.68
2400	\$27.56	\$27.56	\$27.56	\$27.56	\$51.68	\$51.68	\$51.68	\$51.68
2500	\$27.56	\$27.56	\$27.56	\$27.56	\$51.68	\$51.68	\$51.68	\$51.68

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 5

Poverty Level = 25%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$34.45	\$34.45	\$37.06	\$33.89
800	\$34.45	\$34.45	\$42.66	\$36.31
900	\$34.45	\$34.45	\$48.25	\$38.73
1000	\$34.45	\$34.45	\$53.84	\$41.15
1100	\$34.45	\$34.45	\$59.43	\$43.57
1200	\$34.45	\$34.45	\$64.59	\$45.99
1300	\$34.45	\$34.45	\$64.59	\$48.41
1400	\$34.45	\$34.45	\$64.59	\$50.83
1500	\$34.45	\$34.45	\$64.59	\$53.25
1600	\$34.45	\$34.45	\$64.59	\$55.67
1700	\$34.45	\$34.45	\$64.59	\$58.09
1800	\$34.45	\$34.45	\$64.59	\$60.51
1900	\$34.45	\$34.45	\$64.59	\$62.93
2000	\$34.45	\$34.45	\$64.59	\$64.59
2100	\$34.45	\$34.45	\$64.59	\$64.59
2200	\$34.45	\$34.45	\$64.59	\$64.59
2300	\$34.45	\$34.45	\$64.59	\$64.59
2400	\$34.45	\$34.45	\$64.59	\$64.59
2500	\$34.45	\$34.45	\$64.59	\$64.59

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 5

Poverty Level = 30%

Usage/Mo (KWh)	POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R	
	Summer	Winter	H Summer	R-H Winter		
100	\$12.00	\$12.00	\$30.00	\$30.00		
200	\$12.00	\$12.00	\$30.00	\$30.00		
300	\$16.80	\$16.80	\$30.00	\$30.00		
400	\$21.71	\$21.71	\$30.00	\$30.00		
500	\$26.63	\$26.63	\$30.00	\$30.00		
600	\$32.20	\$31.54	\$31.47	\$31.47		
700	\$37.77	\$36.46	\$37.06	\$33.89		
800	\$41.34	\$41.34	\$42.66	\$36.31		
900	\$41.34	\$41.34	\$48.25	\$38.73		
1000	\$41.34	\$41.34	\$53.84	\$41.15		
1100	\$41.34	\$41.34	\$59.43	\$43.57		
1200	\$41.34	\$41.34	\$65.02	\$45.99		
1300	\$41.34	\$41.34	\$70.62	\$48.41		
1400	\$41.34	\$41.34	\$76.21	\$50.83		
1500	\$41.34	\$41.34	\$77.51	\$53.25		
1600	\$41.34	\$41.34	\$77.51	\$55.67		
1700	\$41.34	\$41.34	\$77.51	\$58.09		
1800	\$41.34	\$41.34	\$77.51	\$60.51		
1900	\$41.34	\$41.34	\$77.51	\$62.93		
2000	\$41.34	\$41.34	\$77.51	\$65.35		
2100	\$41.34	\$41.34	\$77.51	\$67.77		
2200	\$41.34	\$41.34	\$77.51	\$70.19		
2300	\$41.34	\$41.34	\$77.51	\$72.61		
2400	\$41.34	\$41.34	\$77.51	\$75.03		
2500	\$41.34	\$41.34	\$77.51	\$77.45		

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 5

Poverty Level = 35%

Usage/Mo (KW h)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R-H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$37.77	\$36.46	\$37.06	\$33.89
800	\$43.34	\$41.38	\$42.66	\$36.31
900	\$48.23	\$46.29	\$48.25	\$38.73
1000	\$48.23	\$48.23	\$53.84	\$41.15
1100	\$48.23	\$48.23	\$59.43	\$43.57
1200	\$48.23	\$48.23	\$65.02	\$45.99
1300	\$48.23	\$48.23	\$70.62	\$48.41
1400	\$48.23	\$48.23	\$76.21	\$50.83
1500	\$48.23	\$48.23	\$81.80	\$53.25
1600	\$48.23	\$48.23	\$87.39	\$55.67
1700	\$48.23	\$48.23	\$90.43	\$58.09
1800	\$48.23	\$48.23	\$90.43	\$60.51
1900	\$48.23	\$48.23	\$90.43	\$62.93
2000	\$48.23	\$48.23	\$90.43	\$65.35
2100	\$48.23	\$48.23	\$90.43	\$67.77
2200	\$48.23	\$48.23	\$90.43	\$70.19
2300	\$48.23	\$48.23	\$90.43	\$72.61
2400	\$48.23	\$48.23	\$90.43	\$75.03
2500	\$48.23	\$48.23	\$90.43	\$77.45

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 5

Poverty Level = 40%

Usage/Mo (KWh)	POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R	
	Summer	Winter	Winter	R-H Summer	R-H Summer	H Winter	H Winter	
100	\$12.00	\$12.00	\$12.00	\$30.00	\$30.00	\$30.00	\$30.00	
200	\$12.00	\$12.00	\$12.00	\$30.00	\$30.00	\$30.00	\$30.00	
300	\$16.80	\$16.80	\$16.80	\$30.00	\$30.00	\$30.00	\$30.00	
400	\$21.71	\$21.71	\$21.71	\$30.00	\$30.00	\$30.00	\$30.00	
500	\$26.63	\$26.63	\$26.63	\$30.00	\$30.00	\$30.00	\$30.00	
600	\$32.20	\$31.54	\$31.54	\$31.47	\$31.47	\$31.47	\$31.47	
700	\$37.77	\$36.46	\$36.46	\$37.06	\$37.06	\$37.06	\$33.89	
800	\$43.34	\$41.38	\$41.38	\$42.66	\$42.66	\$42.66	\$36.31	
900	\$48.92	\$46.29	\$46.29	\$48.25	\$48.25	\$48.25	\$38.73	
1000	\$54.49	\$51.21	\$51.21	\$53.84	\$53.84	\$53.84	\$41.15	
1100	\$55.12	\$55.12	\$55.12	\$59.43	\$59.43	\$59.43	\$43.57	
1200	\$55.12	\$55.12	\$55.12	\$65.02	\$65.02	\$65.02	\$45.99	
1300	\$55.12	\$55.12	\$55.12	\$70.62	\$70.62	\$70.62	\$48.41	
1400	\$55.12	\$55.12	\$55.12	\$76.21	\$76.21	\$76.21	\$50.83	
1500	\$55.12	\$55.12	\$55.12	\$81.80	\$81.80	\$81.80	\$53.25	
1600	\$55.12	\$55.12	\$55.12	\$87.39	\$87.39	\$87.39	\$55.67	
1700	\$55.12	\$55.12	\$55.12	\$92.98	\$92.98	\$92.98	\$58.09	
1800	\$55.12	\$55.12	\$55.12	\$98.58	\$98.58	\$98.58	\$60.51	
1900	\$55.12	\$55.12	\$55.12	\$103.35	\$103.35	\$103.35	\$62.93	
2000	\$55.12	\$55.12	\$55.12	\$103.35	\$103.35	\$103.35	\$65.35	
2100	\$55.12	\$55.12	\$55.12	\$103.35	\$103.35	\$103.35	\$67.77	
2200	\$55.12	\$55.12	\$55.12	\$103.35	\$103.35	\$103.35	\$70.19	
2300	\$55.12	\$55.12	\$55.12	\$103.35	\$103.35	\$103.35	\$72.61	
2400	\$55.12	\$55.12	\$55.12	\$103.35	\$103.35	\$103.35	\$75.03	
2500	\$55.12	\$55.12	\$55.12	\$103.35	\$103.35	\$103.35	\$77.45	

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 5

Poverty Level = 45%

Usage/Mo (KW h)	POB/PIPP Summer	Rate R	POB/PIPP Rate R Winter	POB/PIPP R-H Summer	Rate R	POB/PIPP H Winter	Rate R-
100		\$12.00	\$12.00		\$30.00		\$30.00
200		\$12.00	\$12.00		\$30.00		\$30.00
300		\$16.80	\$16.80		\$30.00		\$30.00
400		\$21.71	\$21.71		\$30.00		\$30.00
500		\$26.63	\$26.63		\$30.00		\$30.00
600		\$32.20	\$31.54		\$31.47		\$31.47
700		\$37.77	\$36.46		\$37.06		\$33.89
800		\$43.34	\$41.38		\$42.66		\$36.31
900		\$48.92	\$46.29		\$48.25		\$38.73
1000		\$54.49	\$51.21		\$53.84		\$41.15
1100		\$60.06	\$56.12		\$59.43		\$43.57
1200		\$62.01	\$61.04		\$65.02		\$45.99
1300		\$62.01	\$62.01		\$70.62		\$48.41
1400		\$62.01	\$62.01		\$76.21		\$50.83
1500		\$62.01	\$62.01		\$81.80		\$53.25
1600		\$62.01	\$62.01		\$87.39		\$55.67
1700		\$62.01	\$62.01		\$92.98		\$58.09
1800		\$62.01	\$62.01		\$98.58		\$60.51
1900		\$62.01	\$62.01		\$104.17		\$62.93
2000		\$62.01	\$62.01		\$109.76		\$65.35
2100		\$62.01	\$62.01		\$115.35		\$67.77
2200		\$62.01	\$62.01		\$116.27		\$70.19
2300		\$62.01	\$62.01		\$116.27		\$72.61
2400		\$62.01	\$62.01		\$116.27		\$75.03
2500		\$62.01	\$62.01		\$116.27		\$77.45

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 5

Poverty Level = 50%

Usage/Mo (KW h)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$37.77	\$36.46	\$37.06	\$33.89
800	\$43.34	\$41.38	\$42.66	\$36.31
900	\$48.92	\$46.29	\$48.25	\$38.73
1000	\$54.49	\$51.21	\$53.84	\$41.15
1100	\$60.06	\$56.12	\$59.43	\$43.57
1200	\$65.63	\$61.04	\$65.02	\$45.99
1300	\$68.90	\$65.96	\$70.62	\$48.41
1400	\$68.90	\$68.90	\$76.21	\$50.83
1500	\$68.90	\$68.90	\$81.80	\$53.25
1600	\$68.90	\$68.90	\$87.39	\$55.67
1700	\$68.90	\$68.90	\$92.98	\$58.09
1800	\$68.90	\$68.90	\$98.58	\$60.51
1900	\$68.90	\$68.90	\$104.17	\$62.93
2000	\$68.90	\$68.90	\$109.76	\$65.35
2100	\$68.90	\$68.90	\$115.35	\$67.77
2200	\$68.90	\$68.90	\$120.94	\$70.19
2300	\$68.90	\$68.90	\$126.54	\$72.61
2400	\$68.90	\$68.90	\$129.19	\$75.03
2500	\$68.90	\$68.90	\$129.19	\$77.45

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 6

Poverty Level = 5%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R H Summer	POB/PIPP Rate R H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$12.00	\$12.00	\$30.00	\$30.00
400	\$12.00	\$12.00	\$30.00	\$30.00
500	\$12.00	\$12.00	\$30.00	\$30.00
600	\$12.00	\$12.00	\$30.00	\$30.00
700	\$12.00	\$12.00	\$30.00	\$30.00
800	\$12.00	\$12.00	\$30.00	\$30.00
900	\$12.00	\$12.00	\$30.00	\$30.00
1000	\$12.00	\$12.00	\$30.00	\$30.00
1100	\$12.00	\$12.00	\$30.00	\$30.00
1200	\$12.00	\$12.00	\$30.00	\$30.00
1300	\$12.00	\$12.00	\$30.00	\$30.00
1400	\$12.00	\$12.00	\$30.00	\$30.00
1500	\$12.00	\$12.00	\$30.00	\$30.00
1600	\$12.00	\$12.00	\$30.00	\$30.00
1700	\$12.00	\$12.00	\$30.00	\$30.00
1800	\$12.00	\$12.00	\$30.00	\$30.00
1900	\$12.00	\$12.00	\$30.00	\$30.00
2000	\$12.00	\$12.00	\$30.00	\$30.00
2100	\$12.00	\$12.00	\$30.00	\$30.00
2200	\$12.00	\$12.00	\$30.00	\$30.00
2300	\$12.00	\$12.00	\$30.00	\$30.00
2400	\$12.00	\$12.00	\$30.00	\$30.00
2500	\$12.00	\$12.00	\$30.00	\$30.00

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 6

Poverty Level = 10%

Usage/Mo (KW h)	POB/PIPP Rate R		POB/PIPP Rate R - H	
	Summer	R Winter	Summer	H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$15.79	\$15.79	\$30.00	\$30.00
400	\$15.79	\$15.79	\$30.00	\$30.00
500	\$15.79	\$15.79	\$30.00	\$30.00
600	\$15.79	\$15.79	\$30.00	\$30.00
700	\$15.79	\$15.79	\$30.00	\$30.00
800	\$15.79	\$15.79	\$30.00	\$30.00
900	\$15.79	\$15.79	\$30.00	\$30.00
1000	\$15.79	\$15.79	\$30.00	\$30.00
1100	\$15.79	\$15.79	\$30.00	\$30.00
1200	\$15.79	\$15.79	\$30.00	\$30.00
1300	\$15.79	\$15.79	\$30.00	\$30.00
1400	\$15.79	\$15.79	\$30.00	\$30.00
1500	\$15.79	\$15.79	\$30.00	\$30.00
1600	\$15.79	\$15.79	\$30.00	\$30.00
1700	\$15.79	\$15.79	\$30.00	\$30.00
1800	\$15.79	\$15.79	\$30.00	\$30.00
1900	\$15.79	\$15.79	\$30.00	\$30.00
2000	\$15.79	\$15.79	\$30.00	\$30.00
2100	\$15.79	\$15.79	\$30.00	\$30.00
2200	\$15.79	\$15.79	\$30.00	\$30.00
2300	\$15.79	\$15.79	\$30.00	\$30.00
2400	\$15.79	\$15.79	\$30.00	\$30.00
2500	\$15.79	\$15.79	\$30.00	\$30.00

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 6

Poverty Level = 15%

Usage/Mo (KWh)	POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R-H		POB/PIPP Rate R-H	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
100	\$12.00	\$12.00	\$12.00	\$12.00	\$30.00	\$30.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$12.00	\$12.00	\$30.00	\$30.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$16.80	\$16.80	\$30.00	\$30.00	\$30.00	\$30.00
400	\$21.71	\$21.71	\$21.71	\$21.71	\$30.00	\$30.00	\$30.00	\$30.00
500	\$23.69	\$23.69	\$23.69	\$23.69	\$30.00	\$30.00	\$30.00	\$30.00
600	\$23.69	\$23.69	\$23.69	\$23.69	\$31.47	\$31.47	\$31.47	\$31.47
700	\$23.69	\$23.69	\$23.69	\$23.69	\$37.06	\$37.06	\$33.89	\$33.89
800	\$23.69	\$23.69	\$23.69	\$23.69	\$42.66	\$42.66	\$36.31	\$36.31
900	\$23.69	\$23.69	\$23.69	\$23.69	\$44.42	\$44.42	\$38.73	\$38.73
1000	\$23.69	\$23.69	\$23.69	\$23.69	\$44.42	\$44.42	\$41.15	\$41.15
1100	\$23.69	\$23.69	\$23.69	\$23.69	\$44.42	\$44.42	\$43.57	\$43.57
1200	\$23.69	\$23.69	\$23.69	\$23.69	\$44.42	\$44.42	\$44.42	\$44.42
1300	\$23.69	\$23.69	\$23.69	\$23.69	\$44.42	\$44.42	\$44.42	\$44.42
1400	\$23.69	\$23.69	\$23.69	\$23.69	\$44.42	\$44.42	\$44.42	\$44.42
1500	\$23.69	\$23.69	\$23.69	\$23.69	\$44.42	\$44.42	\$44.42	\$44.42
1600	\$23.69	\$23.69	\$23.69	\$23.69	\$44.42	\$44.42	\$44.42	\$44.42
1700	\$23.69	\$23.69	\$23.69	\$23.69	\$44.42	\$44.42	\$44.42	\$44.42
1800	\$23.69	\$23.69	\$23.69	\$23.69	\$44.42	\$44.42	\$44.42	\$44.42
1900	\$23.69	\$23.69	\$23.69	\$23.69	\$44.42	\$44.42	\$44.42	\$44.42
2000	\$23.69	\$23.69	\$23.69	\$23.69	\$44.42	\$44.42	\$44.42	\$44.42
2100	\$23.69	\$23.69	\$23.69	\$23.69	\$44.42	\$44.42	\$44.42	\$44.42
2200	\$23.69	\$23.69	\$23.69	\$23.69	\$44.42	\$44.42	\$44.42	\$44.42
2300	\$23.69	\$23.69	\$23.69	\$23.69	\$44.42	\$44.42	\$44.42	\$44.42
2400	\$23.69	\$23.69	\$23.69	\$23.69	\$44.42	\$44.42	\$44.42	\$44.42
2500	\$23.69	\$23.69	\$23.69	\$23.69	\$44.42	\$44.42	\$44.42	\$44.42

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 6

Poverty Level = 20%

Usage/Mo (KW h)	POB/PIPP Rate R							
	Summer		Winter		R-H Summer		H Winter	
100		\$12.00		\$12.00		\$30.00		\$30.00
200		\$12.00		\$12.00		\$30.00		\$30.00
300		\$16.80		\$16.80		\$30.00		\$30.00
400		\$21.71		\$21.71		\$30.00		\$30.00
500		\$26.63		\$26.63		\$30.00		\$30.00
600		\$31.59		\$31.54		\$31.47		\$31.47
700		\$31.59		\$31.59		\$37.06		\$33.89
800		\$31.59		\$31.59		\$42.66		\$36.31
900		\$31.59		\$31.59		\$48.25		\$38.73
1000		\$31.59		\$31.59		\$53.84		\$41.15
1100		\$31.59		\$31.59		\$59.23		\$43.57
1200		\$31.59		\$31.59		\$59.23		\$45.99
1300		\$31.59		\$31.59		\$59.23		\$48.41
1400		\$31.59		\$31.59		\$59.23		\$50.83
1500		\$31.59		\$31.59		\$59.23		\$53.25
1600		\$31.59		\$31.59		\$59.23		\$55.67
1700		\$31.59		\$31.59		\$59.23		\$58.09
1800		\$31.59		\$31.59		\$59.23		\$59.23
1900		\$31.59		\$31.59		\$59.23		\$59.23
2000		\$31.59		\$31.59		\$59.23		\$59.23
2100		\$31.59		\$31.59		\$59.23		\$59.23
2200		\$31.59		\$31.59		\$59.23		\$59.23
2300		\$31.59		\$31.59		\$59.23		\$59.23
2400		\$31.59		\$31.59		\$59.23		\$59.23
2500		\$31.59		\$31.59		\$59.23		\$59.23

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 6

Poverty Level = 25%

Usage/Mo (KWh)	POB/PIPP Rate		POB/PIPP Rate		POB/PIPP Rate		POB/PIPP Rate R	
	R	Summer	R	Winter	R-H	Summer	H	Winter
100		\$12.00		\$12.00		\$30.00		\$30.00
200		\$12.00		\$12.00		\$30.00		\$30.00
300		\$16.80		\$16.80		\$30.00		\$30.00
400		\$21.71		\$21.71		\$30.00		\$30.00
500		\$26.63		\$26.63		\$30.00		\$30.00
600		\$32.20		\$31.54		\$31.47		\$31.47
700		\$39.48		\$36.46		\$37.06		\$33.89
800		\$39.48		\$39.48		\$42.66		\$36.31
900		\$39.48		\$39.48		\$48.25		\$38.73
1000		\$39.48		\$39.48		\$53.84		\$41.15
1100		\$39.48		\$39.48		\$59.43		\$43.57
1200		\$39.48		\$39.48		\$65.02		\$45.99
1300		\$39.48		\$39.48		\$70.62		\$48.41
1400		\$39.48		\$39.48		\$74.03		\$50.83
1500		\$39.48		\$39.48		\$74.03		\$53.25
1600		\$39.48		\$39.48		\$74.03		\$55.67
1700		\$39.48		\$39.48		\$74.03		\$58.09
1800		\$39.48		\$39.48		\$74.03		\$60.51
1900		\$39.48		\$39.48		\$74.03		\$62.93
2000		\$39.48		\$39.48		\$74.03		\$65.35
2100		\$39.48		\$39.48		\$74.03		\$67.77
2200		\$39.48		\$39.48		\$74.03		\$70.19
2300		\$39.48		\$39.48		\$74.03		\$72.61
2400		\$39.48		\$39.48		\$74.03		\$74.03
2500		\$39.48		\$39.48		\$74.03		\$74.03

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 6

Poverty Level = 30%

Usage/Mo (KWh)	POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R	
	Summer	Winter	H Summer	R-H Winter		
100	\$12.00	\$12.00	\$30.00	\$30.00		
200	\$12.00	\$12.00	\$30.00	\$30.00		
300	\$16.80	\$16.80	\$30.00	\$30.00		
400	\$21.71	\$21.71	\$30.00	\$30.00		
500	\$26.63	\$26.63	\$30.00	\$30.00		
600	\$32.20	\$31.54	\$31.47	\$31.47		
700	\$37.77	\$36.46	\$37.06	\$33.89		
800	\$43.34	\$41.38	\$42.66	\$36.31		
900	\$47.38	\$46.29	\$48.25	\$38.73		
1000	\$47.38	\$47.38	\$53.84	\$41.15		
1100	\$47.38	\$47.38	\$59.43	\$43.57		
1200	\$47.38	\$47.38	\$65.02	\$45.99		
1300	\$47.38	\$47.38	\$70.62	\$48.41		
1400	\$47.38	\$47.38	\$76.21	\$50.83		
1500	\$47.38	\$47.38	\$81.80	\$53.25		
1600	\$47.38	\$47.38	\$87.39	\$55.67		
1700	\$47.38	\$47.38	\$88.84	\$58.09		
1800	\$47.38	\$47.38	\$88.84	\$60.51		
1900	\$47.38	\$47.38	\$88.84	\$62.93		
2000	\$47.38	\$47.38	\$88.84	\$65.35		
2100	\$47.38	\$47.38	\$88.84	\$67.77		
2200	\$47.38	\$47.38	\$88.84	\$70.19		
2300	\$47.38	\$47.38	\$88.84	\$72.61		
2400	\$47.38	\$47.38	\$88.84	\$75.03		
2500	\$47.38	\$47.38	\$88.84	\$77.45		

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 6

Poverty Level = 35%

Usage/Mo (KW h)	POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R - H		POB/PIPP Rate R - H	
	Summer		Winter		Summer		Winter	
100	\$12.00	\$12.00	\$12.00	\$12.00	\$30.00	\$30.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$12.00	\$12.00	\$30.00	\$30.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$16.80	\$16.80	\$30.00	\$30.00	\$30.00	\$30.00
400	\$21.71	\$21.71	\$21.71	\$21.71	\$30.00	\$30.00	\$30.00	\$30.00
500	\$26.63	\$26.63	\$26.63	\$26.63	\$30.00	\$30.00	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.54	\$31.54	\$31.47	\$31.47	\$31.47	\$31.47
700	\$37.77	\$36.46	\$36.46	\$36.46	\$37.06	\$37.06	\$33.89	\$33.89
800	\$43.34	\$41.38	\$41.38	\$41.38	\$42.66	\$42.66	\$36.31	\$36.31
900	\$48.92	\$46.29	\$46.29	\$46.29	\$48.25	\$48.25	\$38.73	\$38.73
1000	\$54.49	\$51.21	\$51.21	\$51.21	\$53.84	\$53.84	\$41.15	\$41.15
1100	\$55.28	\$55.28	\$55.28	\$55.28	\$59.43	\$59.43	\$43.57	\$43.57
1200	\$55.28	\$55.28	\$55.28	\$55.28	\$65.02	\$65.02	\$45.99	\$45.99
1300	\$55.28	\$55.28	\$55.28	\$55.28	\$70.62	\$70.62	\$48.41	\$48.41
1400	\$55.28	\$55.28	\$55.28	\$55.28	\$76.21	\$76.21	\$50.83	\$50.83
1500	\$55.28	\$55.28	\$55.28	\$55.28	\$81.80	\$81.80	\$53.25	\$53.25
1600	\$55.28	\$55.28	\$55.28	\$55.28	\$87.39	\$87.39	\$55.67	\$55.67
1700	\$55.28	\$55.28	\$55.28	\$55.28	\$92.98	\$92.98	\$58.09	\$58.09
1800	\$55.28	\$55.28	\$55.28	\$55.28	\$98.58	\$98.58	\$60.51	\$60.51
1900	\$55.28	\$55.28	\$55.28	\$55.28	\$103.64	\$103.64	\$62.93	\$62.93
2000	\$55.28	\$55.28	\$55.28	\$55.28	\$103.64	\$103.64	\$65.35	\$65.35
2100	\$55.28	\$55.28	\$55.28	\$55.28	\$103.64	\$103.64	\$67.77	\$67.77
2200	\$55.28	\$55.28	\$55.28	\$55.28	\$103.64	\$103.64	\$70.19	\$70.19
2300	\$55.28	\$55.28	\$55.28	\$55.28	\$103.64	\$103.64	\$72.61	\$72.61
2400	\$55.28	\$55.28	\$55.28	\$55.28	\$103.64	\$103.64	\$75.03	\$75.03
2500	\$55.28	\$55.28	\$55.28	\$55.28	\$103.64	\$103.64	\$77.45	\$77.45

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 6

Poverty Level = 40%

Usage/Mo (KWh)	POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R	
	Summer		Winter		R-H Summer		H Winter	
100	\$12.00	\$12.00	\$12.00	\$12.00	\$30.00	\$30.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$12.00	\$12.00	\$30.00	\$30.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$16.80	\$16.80	\$30.00	\$30.00	\$30.00	\$30.00
400	\$21.71	\$21.71	\$21.71	\$21.71	\$30.00	\$30.00	\$30.00	\$30.00
500	\$26.63	\$26.63	\$26.63	\$26.63	\$30.00	\$30.00	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.54	\$31.54	\$31.47	\$31.47	\$31.47	\$31.47
700	\$37.77	\$36.46	\$36.46	\$36.46	\$37.06	\$37.06	\$37.06	\$33.89
800	\$43.34	\$41.38	\$41.38	\$41.38	\$42.66	\$42.66	\$42.66	\$36.31
900	\$48.92	\$46.29	\$46.29	\$46.29	\$48.25	\$48.25	\$48.25	\$38.73
1000	\$54.49	\$51.21	\$51.21	\$51.21	\$53.84	\$53.84	\$53.84	\$41.15
1100	\$60.06	\$56.12	\$56.12	\$56.12	\$59.43	\$59.43	\$59.43	\$43.57
1200	\$63.17	\$61.04	\$61.04	\$61.04	\$65.02	\$65.02	\$65.02	\$45.99
1300	\$63.17	\$63.17	\$63.17	\$63.17	\$70.62	\$70.62	\$70.62	\$48.41
1400	\$63.17	\$63.17	\$63.17	\$63.17	\$76.21	\$76.21	\$76.21	\$50.83
1500	\$63.17	\$63.17	\$63.17	\$63.17	\$81.80	\$81.80	\$81.80	\$53.25
1600	\$63.17	\$63.17	\$63.17	\$63.17	\$87.39	\$87.39	\$87.39	\$55.67
1700	\$63.17	\$63.17	\$63.17	\$63.17	\$92.98	\$92.98	\$92.98	\$58.09
1800	\$63.17	\$63.17	\$63.17	\$63.17	\$98.58	\$98.58	\$98.58	\$60.51
1900	\$63.17	\$63.17	\$63.17	\$63.17	\$104.17	\$104.17	\$104.17	\$62.93
2000	\$63.17	\$63.17	\$63.17	\$63.17	\$109.76	\$109.76	\$109.76	\$65.35
2100	\$63.17	\$63.17	\$63.17	\$63.17	\$115.35	\$115.35	\$115.35	\$67.77
2200	\$63.17	\$63.17	\$63.17	\$63.17	\$118.45	\$118.45	\$118.45	\$70.19
2300	\$63.17	\$63.17	\$63.17	\$63.17	\$118.45	\$118.45	\$118.45	\$72.61
2400	\$63.17	\$63.17	\$63.17	\$63.17	\$118.45	\$118.45	\$118.45	\$75.03
2500	\$63.17	\$63.17	\$63.17	\$63.17	\$118.45	\$118.45	\$118.45	\$77.45

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 6

Poverty Level = 45%

Usage/Mo (KW h)	POB/PIPP Rate R		POB/PIPP Rate R	
	Summer	Winter	R-H Summer	H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$37.77	\$36.46	\$37.06	\$33.89
800	\$43.34	\$41.38	\$42.66	\$36.31
900	\$48.92	\$46.29	\$48.25	\$38.73
1000	\$54.49	\$51.21	\$53.84	\$41.15
1100	\$60.06	\$56.12	\$59.43	\$43.57
1200	\$65.63	\$61.04	\$65.02	\$45.99
1300	\$71.20	\$65.96	\$70.62	\$48.41
1400	\$71.07	\$70.87	\$76.21	\$50.83
1500	\$71.07	\$71.07	\$81.80	\$53.25
1600	\$71.07	\$71.07	\$87.39	\$55.67
1700	\$71.07	\$71.07	\$92.98	\$58.09
1800	\$71.07	\$71.07	\$98.58	\$60.51
1900	\$71.07	\$71.07	\$104.17	\$62.93
2000	\$71.07	\$71.07	\$109.76	\$65.35
2100	\$71.07	\$71.07	\$115.35	\$67.77
2200	\$71.07	\$71.07	\$120.94	\$70.19
2300	\$71.07	\$71.07	\$126.54	\$72.61
2400	\$71.07	\$71.07	\$132.13	\$75.03
2500	\$71.07	\$71.07	\$133.26	\$77.45

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 6

Poverty Level = 50%

Usage/Mo (KW h)	POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R	
	Summer	R	R	Winter	R-H Summer	H	H	Winter
100		\$12.00		\$12.00		\$30.00		\$30.00
200		\$12.00		\$12.00		\$30.00		\$30.00
300		\$16.80		\$16.80		\$30.00		\$30.00
400		\$21.71		\$21.71		\$30.00		\$30.00
500		\$26.63		\$26.63		\$30.00		\$30.00
600		\$32.20		\$31.54		\$31.47		\$31.47
700		\$37.77		\$36.46		\$37.06		\$33.89
800		\$43.34		\$41.38		\$42.66		\$36.31
900		\$48.92		\$46.29		\$48.25		\$38.73
1000		\$54.49		\$51.21		\$53.84		\$41.15
1100		\$60.06		\$56.12		\$59.43		\$43.57
1200		\$65.63		\$61.04		\$65.02		\$45.99
1300		\$71.20		\$65.96		\$70.62		\$48.41
1400		\$76.78		\$70.87		\$76.21		\$50.83
1500		\$78.97		\$75.79		\$81.80		\$53.25
1600		\$78.97		\$78.97		\$87.39		\$55.67
1700		\$78.97		\$78.97		\$92.98		\$58.09
1800		\$78.97		\$78.97		\$98.58		\$60.51
1900		\$78.97		\$78.97		\$104.17		\$62.93
2000		\$78.97		\$78.97		\$109.76		\$65.35
2100		\$78.97		\$78.97		\$115.35		\$67.77
2200		\$78.97		\$78.97		\$120.94		\$70.19
2300		\$78.97		\$78.97		\$126.54		\$72.61
2400		\$78.97		\$78.97		\$132.13		\$75.03
2500		\$78.97		\$78.97		\$137.72		\$77.45

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 7

Poverty Level = 5%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate H Summer	POB/PIPP Rate H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$12.00	\$12.00	\$30.00	\$30.00
400	\$12.00	\$12.00	\$30.00	\$30.00
500	\$12.00	\$12.00	\$30.00	\$30.00
600	\$12.00	\$12.00	\$30.00	\$30.00
700	\$12.00	\$12.00	\$30.00	\$30.00
800	\$12.00	\$12.00	\$30.00	\$30.00
900	\$12.00	\$12.00	\$30.00	\$30.00
1000	\$12.00	\$12.00	\$30.00	\$30.00
1100	\$12.00	\$12.00	\$30.00	\$30.00
1200	\$12.00	\$12.00	\$30.00	\$30.00
1300	\$12.00	\$12.00	\$30.00	\$30.00
1400	\$12.00	\$12.00	\$30.00	\$30.00
1500	\$12.00	\$12.00	\$30.00	\$30.00
1600	\$12.00	\$12.00	\$30.00	\$30.00
1700	\$12.00	\$12.00	\$30.00	\$30.00
1800	\$12.00	\$12.00	\$30.00	\$30.00
1900	\$12.00	\$12.00	\$30.00	\$30.00
2000	\$12.00	\$12.00	\$30.00	\$30.00
2100	\$12.00	\$12.00	\$30.00	\$30.00
2200	\$12.00	\$12.00	\$30.00	\$30.00
2300	\$12.00	\$12.00	\$30.00	\$30.00
2400	\$12.00	\$12.00	\$30.00	\$30.00
2500	\$12.00	\$12.00	\$30.00	\$30.00

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 7

Poverty Level = 10%

Usage/Mo (KW h)	POB/PIPP Rate R		POB/PIPP Rate R - H	
	Summer	R Winter	Summer	H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$17.81	\$17.81	\$30.00	\$30.00
500	\$17.81	\$17.81	\$30.00	\$30.00
600	\$17.81	\$17.81	\$31.47	\$31.47
700	\$17.81	\$17.81	\$33.39	\$33.39
800	\$17.81	\$17.81	\$33.39	\$33.39
900	\$17.81	\$17.81	\$33.39	\$33.39
1000	\$17.81	\$17.81	\$33.39	\$33.39
1100	\$17.81	\$17.81	\$33.39	\$33.39
1200	\$17.81	\$17.81	\$33.39	\$33.39
1300	\$17.81	\$17.81	\$33.39	\$33.39
1400	\$17.81	\$17.81	\$33.39	\$33.39
1500	\$17.81	\$17.81	\$33.39	\$33.39
1600	\$17.81	\$17.81	\$33.39	\$33.39
1700	\$17.81	\$17.81	\$33.39	\$33.39
1800	\$17.81	\$17.81	\$33.39	\$33.39
1900	\$17.81	\$17.81	\$33.39	\$33.39
2000	\$17.81	\$17.81	\$33.39	\$33.39
2100	\$17.81	\$17.81	\$33.39	\$33.39
2200	\$17.81	\$17.81	\$33.39	\$33.39
2300	\$17.81	\$17.81	\$33.39	\$33.39
2400	\$17.81	\$17.81	\$33.39	\$33.39
2500	\$17.81	\$17.81	\$33.39	\$33.39

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 7

Poverty Level = 15%

Usage/Mo (KW h)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R-H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$26.71	\$26.71	\$31.47	\$31.47
700	\$26.71	\$26.71	\$37.06	\$33.89
800	\$26.71	\$26.71	\$42.66	\$36.31
900	\$26.71	\$26.71	\$48.25	\$38.73
1000	\$26.71	\$26.71	\$50.08	\$41.15
1100	\$26.71	\$26.71	\$50.08	\$43.57
1200	\$26.71	\$26.71	\$50.08	\$45.99
1300	\$26.71	\$26.71	\$50.08	\$48.41
1400	\$26.71	\$26.71	\$50.08	\$50.08
1500	\$26.71	\$26.71	\$50.08	\$50.08
1600	\$26.71	\$26.71	\$50.08	\$50.08
1700	\$26.71	\$26.71	\$50.08	\$50.08
1800	\$26.71	\$26.71	\$50.08	\$50.08
1900	\$26.71	\$26.71	\$50.08	\$50.08
2000	\$26.71	\$26.71	\$50.08	\$50.08
2100	\$26.71	\$26.71	\$50.08	\$50.08
2200	\$26.71	\$26.71	\$50.08	\$50.08
2300	\$26.71	\$26.71	\$50.08	\$50.08
2400	\$26.71	\$26.71	\$50.08	\$50.08
2500	\$26.71	\$26.71	\$50.08	\$50.08

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 7

Poverty Level = 20%

Usage/Mo (KW h)	POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R	
	Summer	Winter	Summer	Winter	R-H Summer	H Winter	R-H Summer	H Winter
100	\$12.00	\$12.00	\$12.00	\$12.00	\$30.00	\$30.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$12.00	\$12.00	\$30.00	\$30.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$16.80	\$16.80	\$30.00	\$30.00	\$30.00	\$30.00
400	\$21.71	\$21.71	\$21.71	\$21.71	\$30.00	\$30.00	\$30.00	\$30.00
500	\$26.63	\$26.63	\$26.63	\$26.63	\$30.00	\$30.00	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.54	\$31.54	\$31.47	\$31.47	\$31.47	\$31.47
700	\$35.61	\$35.61	\$35.61	\$35.61	\$37.06	\$37.06	\$37.06	\$33.89
800	\$35.61	\$35.61	\$35.61	\$35.61	\$42.66	\$42.66	\$42.66	\$36.31
900	\$35.61	\$35.61	\$35.61	\$35.61	\$48.25	\$48.25	\$48.25	\$38.73
1000	\$35.61	\$35.61	\$35.61	\$35.61	\$53.84	\$53.84	\$53.84	\$41.15
1100	\$35.61	\$35.61	\$35.61	\$35.61	\$59.43	\$59.43	\$59.43	\$43.57
1200	\$35.61	\$35.61	\$35.61	\$35.61	\$65.02	\$65.02	\$65.02	\$45.99
1300	\$35.61	\$35.61	\$35.61	\$35.61	\$66.78	\$66.78	\$66.78	\$48.41
1400	\$35.61	\$35.61	\$35.61	\$35.61	\$66.78	\$66.78	\$66.78	\$50.83
1500	\$35.61	\$35.61	\$35.61	\$35.61	\$66.78	\$66.78	\$66.78	\$53.25
1600	\$35.61	\$35.61	\$35.61	\$35.61	\$66.78	\$66.78	\$66.78	\$55.67
1700	\$35.61	\$35.61	\$35.61	\$35.61	\$66.78	\$66.78	\$66.78	\$58.09
1800	\$35.61	\$35.61	\$35.61	\$35.61	\$66.78	\$66.78	\$66.78	\$60.51
1900	\$35.61	\$35.61	\$35.61	\$35.61	\$66.78	\$66.78	\$66.78	\$62.93
2000	\$35.61	\$35.61	\$35.61	\$35.61	\$66.78	\$66.78	\$66.78	\$65.35
2100	\$35.61	\$35.61	\$35.61	\$35.61	\$66.78	\$66.78	\$66.78	\$66.78
2200	\$35.61	\$35.61	\$35.61	\$35.61	\$66.78	\$66.78	\$66.78	\$66.78
2300	\$35.61	\$35.61	\$35.61	\$35.61	\$66.78	\$66.78	\$66.78	\$66.78
2400	\$35.61	\$35.61	\$35.61	\$35.61	\$66.78	\$66.78	\$66.78	\$66.78
2500	\$35.61	\$35.61	\$35.61	\$35.61	\$66.78	\$66.78	\$66.78	\$66.78

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 7

Poverty Level = 25%

Usage/Mo (KWh)	POB/PIPP Rate		POB/PIPP Rate		POB/PIPP Rate		POB/PIPP Rate R	
	R	Summer	R	Winter	R-H	Summer	H	Winter
100		\$12.00		\$12.00		\$30.00		\$30.00
200		\$12.00		\$12.00		\$30.00		\$30.00
300		\$16.80		\$16.80		\$30.00		\$30.00
400		\$21.71		\$21.71		\$30.00		\$30.00
500		\$26.63		\$26.63		\$30.00		\$30.00
600		\$32.20		\$31.54		\$31.47		\$31.47
700		\$37.77		\$36.46		\$37.06		\$33.89
800		\$43.34		\$41.38		\$42.66		\$36.31
900		\$44.52		\$44.52		\$48.25		\$38.73
1000		\$44.52		\$44.52		\$53.84		\$41.15
1100		\$44.52		\$44.52		\$59.43		\$43.57
1200		\$44.52		\$44.52		\$65.02		\$45.99
1300		\$44.52		\$44.52		\$70.62		\$48.41
1400		\$44.52		\$44.52		\$76.21		\$50.83
1500		\$44.52		\$44.52		\$81.80		\$53.25
1600		\$44.52		\$44.52		\$83.47		\$55.67
1700		\$44.52		\$44.52		\$83.47		\$58.09
1800		\$44.52		\$44.52		\$83.47		\$60.51
1900		\$44.52		\$44.52		\$83.47		\$62.93
2000		\$44.52		\$44.52		\$83.47		\$65.35
2100		\$44.52		\$44.52		\$83.47		\$67.77
2200		\$44.52		\$44.52		\$83.47		\$70.19
2300		\$44.52		\$44.52		\$83.47		\$72.61
2400		\$44.52		\$44.52		\$83.47		\$75.03
2500		\$44.52		\$44.52		\$83.47		\$77.45

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 7

Poverty Level = 30%

Usage/Mo (KWh)	POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R	
	Summer	Winter	H Summer	R-H Winter		
100	\$12.00	\$12.00	\$30.00	\$30.00		
200	\$12.00	\$12.00	\$30.00	\$30.00		
300	\$16.80	\$16.80	\$30.00	\$30.00		
400	\$21.71	\$21.71	\$30.00	\$30.00		
500	\$26.63	\$26.63	\$30.00	\$30.00		
600	\$32.20	\$31.54	\$31.47	\$31.47		
700	\$37.77	\$36.46	\$37.06	\$33.89		
800	\$43.34	\$41.38	\$42.66	\$36.31		
900	\$48.92	\$46.29	\$48.25	\$38.73		
1000	\$53.42	\$51.21	\$53.84	\$41.15		
1100	\$53.42	\$53.42	\$59.43	\$43.57		
1200	\$53.42	\$53.42	\$65.02	\$45.99		
1300	\$53.42	\$53.42	\$70.62	\$48.41		
1400	\$53.42	\$53.42	\$76.21	\$50.83		
1500	\$53.42	\$53.42	\$81.80	\$53.25		
1600	\$53.42	\$53.42	\$87.39	\$55.67		
1700	\$53.42	\$53.42	\$92.98	\$58.09		
1800	\$53.42	\$53.42	\$98.58	\$60.51		
1900	\$53.42	\$53.42	\$100.16	\$62.93		
2000	\$53.42	\$53.42	\$100.16	\$65.35		
2100	\$53.42	\$53.42	\$100.16	\$67.77		
2200	\$53.42	\$53.42	\$100.16	\$70.19		
2300	\$53.42	\$53.42	\$100.16	\$72.61		
2400	\$53.42	\$53.42	\$100.16	\$75.03		
2500	\$53.42	\$53.42	\$100.16	\$77.45		

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 7

Poverty Level = 35%

Usage/Mo (KW h)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R-H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$37.77	\$36.46	\$37.06	\$33.89
800	\$43.34	\$41.38	\$42.66	\$36.31
900	\$48.92	\$46.29	\$48.25	\$38.73
1000	\$54.49	\$51.21	\$53.84	\$41.15
1100	\$60.06	\$56.12	\$59.43	\$43.57
1200	\$62.32	\$61.04	\$65.02	\$45.99
1300	\$62.32	\$62.32	\$70.62	\$48.41
1400	\$62.32	\$62.32	\$76.21	\$50.83
1500	\$62.32	\$62.32	\$81.80	\$53.25
1600	\$62.32	\$62.32	\$87.39	\$55.67
1700	\$62.32	\$62.32	\$92.98	\$58.09
1800	\$62.32	\$62.32	\$98.58	\$60.51
1900	\$62.32	\$62.32	\$104.17	\$62.93
2000	\$62.32	\$62.32	\$109.76	\$65.35
2100	\$62.32	\$62.32	\$115.35	\$67.77
2200	\$62.32	\$62.32	\$116.86	\$70.19
2300	\$62.32	\$62.32	\$116.86	\$72.61
2400	\$62.32	\$62.32	\$116.86	\$75.03
2500	\$62.32	\$62.32	\$116.86	\$77.45

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 7

Poverty Level = 40%

Usage/Mo (KWh)	POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R	
	Summer		Winter		R-H Summer		H Winter	
100	\$12.00	\$12.00	\$12.00	\$12.00	\$30.00	\$30.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$12.00	\$12.00	\$30.00	\$30.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$16.80	\$16.80	\$30.00	\$30.00	\$30.00	\$30.00
400	\$21.71	\$21.71	\$21.71	\$21.71	\$30.00	\$30.00	\$30.00	\$30.00
500	\$26.63	\$26.63	\$26.63	\$26.63	\$30.00	\$30.00	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.54	\$31.54	\$31.47	\$31.47	\$31.47	\$31.47
700	\$37.77	\$36.46	\$36.46	\$36.46	\$37.06	\$37.06	\$37.06	\$33.89
800	\$43.34	\$41.38	\$41.38	\$41.38	\$42.66	\$42.66	\$42.66	\$36.31
900	\$48.92	\$46.29	\$46.29	\$46.29	\$48.25	\$48.25	\$48.25	\$38.73
1000	\$54.49	\$51.21	\$51.21	\$51.21	\$53.84	\$53.84	\$53.84	\$41.15
1100	\$60.06	\$56.12	\$56.12	\$56.12	\$59.43	\$59.43	\$59.43	\$43.57
1200	\$65.63	\$61.04	\$61.04	\$61.04	\$65.02	\$65.02	\$65.02	\$45.99
1300	\$71.20	\$65.96	\$65.96	\$65.96	\$70.62	\$70.62	\$70.62	\$48.41
1400	\$71.23	\$70.87	\$70.87	\$70.87	\$76.21	\$76.21	\$76.21	\$50.83
1500	\$71.23	\$71.23	\$71.23	\$71.23	\$81.80	\$81.80	\$81.80	\$53.25
1600	\$71.23	\$71.23	\$71.23	\$71.23	\$87.39	\$87.39	\$87.39	\$55.67
1700	\$71.23	\$71.23	\$71.23	\$71.23	\$92.98	\$92.98	\$92.98	\$58.09
1800	\$71.23	\$71.23	\$71.23	\$71.23	\$98.58	\$98.58	\$98.58	\$60.51
1900	\$71.23	\$71.23	\$71.23	\$71.23	\$104.17	\$104.17	\$104.17	\$62.93
2000	\$71.23	\$71.23	\$71.23	\$71.23	\$109.76	\$109.76	\$109.76	\$65.35
2100	\$71.23	\$71.23	\$71.23	\$71.23	\$115.35	\$115.35	\$115.35	\$67.77
2200	\$71.23	\$71.23	\$71.23	\$71.23	\$120.94	\$120.94	\$120.94	\$70.19
2300	\$71.23	\$71.23	\$71.23	\$71.23	\$126.54	\$126.54	\$126.54	\$72.61
2400	\$71.23	\$71.23	\$71.23	\$71.23	\$132.13	\$132.13	\$132.13	\$75.03
2500	\$71.23	\$71.23	\$71.23	\$71.23	\$133.55	\$133.55	\$133.55	\$77.45

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 7

Poverty Level = 45%

Usage/Mo (KW h)	POB/PIPP Rate R		POB/PIPP Rate R	
	Summer	Rate R	Winter	Rate R
100		\$12.00	\$12.00	
200		\$12.00	\$12.00	
300		\$16.80	\$16.80	
400		\$21.71	\$21.71	
500		\$26.63	\$26.63	
600		\$32.20	\$31.54	\$31.47
700		\$37.77	\$36.46	\$37.06
800		\$43.34	\$41.38	\$42.66
900		\$48.92	\$46.29	\$48.25
1000		\$54.49	\$51.21	\$53.84
1100		\$60.06	\$56.12	\$59.43
1200		\$65.63	\$61.04	\$65.02
1300		\$71.20	\$65.96	\$70.62
1400		\$76.78	\$70.87	\$76.21
1500		\$80.13	\$75.79	\$81.80
1600		\$80.13	\$80.13	\$87.39
1700		\$80.13	\$80.13	\$92.98
1800		\$80.13	\$80.13	\$98.58
1900		\$80.13	\$80.13	\$104.17
2000		\$80.13	\$80.13	\$109.76
2100		\$80.13	\$80.13	\$115.35
2200		\$80.13	\$80.13	\$120.94
2300		\$80.13	\$80.13	\$126.54
2400		\$80.13	\$80.13	\$132.13
2500		\$80.13	\$80.13	\$137.72

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 7

Poverty Level = 50%

Usage/Mo (KW h)	POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R		POB/PIPP Rate R	
	Summer		R Winter		R-H Summer		H Winter	
100		\$12.00		\$12.00		\$30.00		\$30.00
200		\$12.00		\$12.00		\$30.00		\$30.00
300		\$16.80		\$16.80		\$30.00		\$30.00
400		\$21.71		\$21.71		\$30.00		\$30.00
500		\$26.63		\$26.63		\$30.00		\$30.00
600		\$32.20		\$31.54		\$31.47		\$31.47
700		\$37.77		\$36.46		\$37.06		\$33.89
800		\$43.34		\$41.38		\$42.66		\$36.31
900		\$48.92		\$46.29		\$48.25		\$38.73
1000		\$54.49		\$51.21		\$53.84		\$41.15
1100		\$60.06		\$56.12		\$59.43		\$43.57
1200		\$65.63		\$61.04		\$65.02		\$45.99
1300		\$71.20		\$65.96		\$70.62		\$48.41
1400		\$76.78		\$70.87		\$76.21		\$50.83
1500		\$82.35		\$75.79		\$81.80		\$53.25
1600		\$87.92		\$80.70		\$87.39		\$55.67
1700		\$89.03		\$85.62		\$92.98		\$58.09
1800		\$89.03		\$89.03		\$98.58		\$60.51
1900		\$89.03		\$89.03		\$104.17		\$62.93
2000		\$89.03		\$89.03		\$109.76		\$65.35
2100		\$89.03		\$89.03		\$115.35		\$67.77
2200		\$89.03		\$89.03		\$120.94		\$70.19
2300		\$89.03		\$89.03		\$126.54		\$72.61
2400		\$89.03		\$89.03		\$132.13		\$75.03
2500		\$89.03		\$89.03		\$137.72		\$77.45

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 8

Poverty Level = 5%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R H Summer	POB/PIPP Rate R H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$12.00	\$12.00	\$30.00	\$30.00
400	\$12.00	\$12.00	\$30.00	\$30.00
500	\$12.00	\$12.00	\$30.00	\$30.00
600	\$12.00	\$12.00	\$30.00	\$30.00
700	\$12.00	\$12.00	\$30.00	\$30.00
800	\$12.00	\$12.00	\$30.00	\$30.00
900	\$12.00	\$12.00	\$30.00	\$30.00
1000	\$12.00	\$12.00	\$30.00	\$30.00
1100	\$12.00	\$12.00	\$30.00	\$30.00
1200	\$12.00	\$12.00	\$30.00	\$30.00
1300	\$12.00	\$12.00	\$30.00	\$30.00
1400	\$12.00	\$12.00	\$30.00	\$30.00
1500	\$12.00	\$12.00	\$30.00	\$30.00
1600	\$12.00	\$12.00	\$30.00	\$30.00
1700	\$12.00	\$12.00	\$30.00	\$30.00
1800	\$12.00	\$12.00	\$30.00	\$30.00
1900	\$12.00	\$12.00	\$30.00	\$30.00
2000	\$12.00	\$12.00	\$30.00	\$30.00
2100	\$12.00	\$12.00	\$30.00	\$30.00
2200	\$12.00	\$12.00	\$30.00	\$30.00
2300	\$12.00	\$12.00	\$30.00	\$30.00
2400	\$12.00	\$12.00	\$30.00	\$30.00
2500	\$12.00	\$12.00	\$30.00	\$30.00

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 8

Poverty Level = 10%

Usage/Mo (KW h)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R- H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$19.82	\$19.82	\$30.00	\$30.00
500	\$19.82	\$19.82	\$30.00	\$30.00
600	\$19.82	\$19.82	\$31.47	\$31.47
700	\$19.82	\$19.82	\$37.06	\$33.89
800	\$19.82	\$19.82	\$37.16	\$36.31
900	\$19.82	\$19.82	\$37.16	\$37.16
1000	\$19.82	\$19.82	\$37.16	\$37.16
1100	\$19.82	\$19.82	\$37.16	\$37.16
1200	\$19.82	\$19.82	\$37.16	\$37.16
1300	\$19.82	\$19.82	\$37.16	\$37.16
1400	\$19.82	\$19.82	\$37.16	\$37.16
1500	\$19.82	\$19.82	\$37.16	\$37.16
1600	\$19.82	\$19.82	\$37.16	\$37.16
1700	\$19.82	\$19.82	\$37.16	\$37.16
1800	\$19.82	\$19.82	\$37.16	\$37.16
1900	\$19.82	\$19.82	\$37.16	\$37.16
2000	\$19.82	\$19.82	\$37.16	\$37.16
2100	\$19.82	\$19.82	\$37.16	\$37.16
2200	\$19.82	\$19.82	\$37.16	\$37.16
2300	\$19.82	\$19.82	\$37.16	\$37.16
2400	\$19.82	\$19.82	\$37.16	\$37.16
2500	\$19.82	\$19.82	\$37.16	\$37.16

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 8

Poverty Level = 15%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R-H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$29.73	\$29.73	\$31.47	\$31.47
700	\$29.73	\$29.73	\$37.06	\$33.89
800	\$29.73	\$29.73	\$42.66	\$36.31
900	\$29.73	\$29.73	\$48.25	\$38.73
1000	\$29.73	\$29.73	\$53.84	\$41.15
1100	\$29.73	\$29.73	\$55.74	\$43.57
1200	\$29.73	\$29.73	\$55.74	\$45.99
1300	\$29.73	\$29.73	\$55.74	\$48.41
1400	\$29.73	\$29.73	\$55.74	\$50.83
1500	\$29.73	\$29.73	\$55.74	\$53.25
1600	\$29.73	\$29.73	\$55.74	\$55.67
1700	\$29.73	\$29.73	\$55.74	\$55.74
1800	\$29.73	\$29.73	\$55.74	\$55.74
1900	\$29.73	\$29.73	\$55.74	\$55.74
2000	\$29.73	\$29.73	\$55.74	\$55.74
2100	\$29.73	\$29.73	\$55.74	\$55.74
2200	\$29.73	\$29.73	\$55.74	\$55.74
2300	\$29.73	\$29.73	\$55.74	\$55.74
2400	\$29.73	\$29.73	\$55.74	\$55.74
2500	\$29.73	\$29.73	\$55.74	\$55.74

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 8

Poverty Level = 20%

Usage/Mo (KW h)	POB/PIPP Rate R		POB/PIPP Rate R	
	Summer	Winter	R-H Summer	H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$37.77	\$36.46	\$37.06	\$33.89
800	\$39.64	\$39.64	\$42.66	\$36.31
900	\$39.64	\$39.64	\$48.25	\$38.73
1000	\$39.64	\$39.64	\$53.84	\$41.15
1100	\$39.64	\$39.64	\$59.43	\$43.57
1200	\$39.64	\$39.64	\$65.02	\$45.99
1300	\$39.64	\$39.64	\$70.62	\$48.41
1400	\$39.64	\$39.64	\$74.33	\$50.83
1500	\$39.64	\$39.64	\$74.33	\$53.25
1600	\$39.64	\$39.64	\$74.33	\$55.67
1700	\$39.64	\$39.64	\$74.33	\$58.09
1800	\$39.64	\$39.64	\$74.33	\$60.51
1900	\$39.64	\$39.64	\$74.33	\$62.93
2000	\$39.64	\$39.64	\$74.33	\$65.35
2100	\$39.64	\$39.64	\$74.33	\$67.77
2200	\$39.64	\$39.64	\$74.33	\$70.19
2300	\$39.64	\$39.64	\$74.33	\$72.61
2400	\$39.64	\$39.64	\$74.33	\$74.33
2500	\$39.64	\$39.64	\$74.33	\$74.33

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 8

Poverty Level = 25%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$37.77	\$36.46	\$37.06	\$33.89
800	\$43.34	\$41.38	\$42.66	\$36.31
900	\$48.92	\$46.29	\$48.25	\$38.73
1000	\$49.55	\$49.55	\$53.84	\$41.15
1100	\$49.55	\$49.55	\$59.43	\$43.57
1200	\$49.55	\$49.55	\$65.02	\$45.99
1300	\$49.55	\$49.55	\$70.62	\$48.41
1400	\$49.55	\$49.55	\$76.21	\$50.83
1500	\$49.55	\$49.55	\$81.80	\$53.25
1600	\$49.55	\$49.55	\$87.39	\$55.67
1700	\$49.55	\$49.55	\$92.91	\$58.09
1800	\$49.55	\$49.55	\$92.91	\$60.51
1900	\$49.55	\$49.55	\$92.91	\$62.93
2000	\$49.55	\$49.55	\$92.91	\$65.35
2100	\$49.55	\$49.55	\$92.91	\$67.77
2200	\$49.55	\$49.55	\$92.91	\$70.19
2300	\$49.55	\$49.55	\$92.91	\$72.61
2400	\$49.55	\$49.55	\$92.91	\$75.03
2500	\$49.55	\$49.55	\$92.91	\$77.45

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 8

Poverty Level = 30%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R H Summer	POB/PIPP Rate R R-H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$37.77	\$36.46	\$37.06	\$33.89
800	\$43.34	\$41.38	\$42.66	\$36.31
900	\$48.92	\$46.29	\$48.25	\$38.73
1000	\$54.49	\$51.21	\$53.84	\$41.15
1100	\$59.46	\$56.12	\$59.43	\$43.57
1200	\$59.46	\$59.46	\$65.02	\$45.99
1300	\$59.46	\$59.46	\$70.62	\$48.41
1400	\$59.46	\$59.46	\$76.21	\$50.83
1500	\$59.46	\$59.46	\$81.80	\$53.25
1600	\$59.46	\$59.46	\$87.39	\$55.67
1700	\$59.46	\$59.46	\$92.98	\$58.09
1800	\$59.46	\$59.46	\$98.58	\$60.51
1900	\$59.46	\$59.46	\$104.17	\$62.93
2000	\$59.46	\$59.46	\$109.76	\$65.35
2100	\$59.46	\$59.46	\$111.49	\$67.77
2200	\$59.46	\$59.46	\$111.49	\$70.19
2300	\$59.46	\$59.46	\$111.49	\$72.61
2400	\$59.46	\$59.46	\$111.49	\$75.03
2500	\$59.46	\$59.46	\$111.49	\$77.45

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 8

Poverty Level = 35%

Usage/Mo (KW h)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R-H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$37.77	\$36.46	\$37.06	\$33.89
800	\$43.34	\$41.38	\$42.66	\$36.31
900	\$48.92	\$46.29	\$48.25	\$38.73
1000	\$54.49	\$51.21	\$53.84	\$41.15
1100	\$60.06	\$56.12	\$59.43	\$43.57
1200	\$65.63	\$61.04	\$65.02	\$45.99
1300	\$69.37	\$65.96	\$70.62	\$48.41
1400	\$69.37	\$69.37	\$76.21	\$50.83
1500	\$69.37	\$69.37	\$81.80	\$53.25
1600	\$69.37	\$69.37	\$87.39	\$55.67
1700	\$69.37	\$69.37	\$92.98	\$58.09
1800	\$69.37	\$69.37	\$98.58	\$60.51
1900	\$69.37	\$69.37	\$104.17	\$62.93
2000	\$69.37	\$69.37	\$109.76	\$65.35
2100	\$69.37	\$69.37	\$115.35	\$67.77
2200	\$69.37	\$69.37	\$120.94	\$70.19
2300	\$69.37	\$69.37	\$126.54	\$72.61
2400	\$69.37	\$69.37	\$130.07	\$75.03
2500	\$69.37	\$69.37	\$130.07	\$77.45

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 8

Poverty Level = 40%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R- H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$37.77	\$36.46	\$37.06	\$33.89
800	\$43.34	\$41.38	\$42.66	\$36.31
900	\$48.92	\$46.29	\$48.25	\$38.73
1000	\$54.49	\$51.21	\$53.84	\$41.15
1100	\$60.06	\$56.12	\$59.43	\$43.57
1200	\$65.63	\$61.04	\$65.02	\$45.99
1300	\$71.20	\$65.96	\$70.62	\$48.41
1400	\$76.78	\$70.87	\$76.21	\$50.83
1500	\$79.28	\$75.79	\$81.80	\$53.25
1600	\$79.28	\$79.28	\$87.39	\$55.67
1700	\$79.28	\$79.28	\$92.98	\$58.09
1800	\$79.28	\$79.28	\$98.58	\$60.51
1900	\$79.28	\$79.28	\$104.17	\$62.93
2000	\$79.28	\$79.28	\$109.76	\$65.35
2100	\$79.28	\$79.28	\$115.35	\$67.77
2200	\$79.28	\$79.28	\$120.94	\$70.19
2300	\$79.28	\$79.28	\$126.54	\$72.61
2400	\$79.28	\$79.28	\$132.13	\$75.03
2500	\$79.28	\$79.28	\$137.72	\$77.45

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 8

Poverty Level = 45%

Usage/Mo (KW h)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R- H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$37.77	\$36.46	\$37.06	\$33.89
800	\$43.34	\$41.38	\$42.66	\$36.31
900	\$48.92	\$46.29	\$48.25	\$38.73
1000	\$54.49	\$51.21	\$53.84	\$41.15
1100	\$60.06	\$56.12	\$59.43	\$43.57
1200	\$65.63	\$61.04	\$65.02	\$45.99
1300	\$71.20	\$65.96	\$70.62	\$48.41
1400	\$76.78	\$70.87	\$76.21	\$50.83
1500	\$82.35	\$75.79	\$81.80	\$53.25
1600	\$87.92	\$80.70	\$87.39	\$55.67
1700	\$89.19	\$85.62	\$92.98	\$58.09
1800	\$89.19	\$89.19	\$98.58	\$60.51
1900	\$89.19	\$89.19	\$104.17	\$62.93
2000	\$89.19	\$89.19	\$109.76	\$65.35
2100	\$89.19	\$89.19	\$115.35	\$67.77
2200	\$89.19	\$89.19	\$120.94	\$70.19
2300	\$89.19	\$89.19	\$126.54	\$72.61
2400	\$89.19	\$89.19	\$132.13	\$75.03
2500	\$89.19	\$89.19	\$137.72	\$77.45

Indicates Minimum Bill Limit

Indicates Maximum Bill Limit

Family Size = 8

Poverty Level = 50%

Usage/Mo (KWh)	POB/PIPP Rate R Summer	POB/PIPP Rate R Winter	POB/PIPP Rate R-H Summer	POB/PIPP Rate R H Winter
100	\$12.00	\$12.00	\$30.00	\$30.00
200	\$12.00	\$12.00	\$30.00	\$30.00
300	\$16.80	\$16.80	\$30.00	\$30.00
400	\$21.71	\$21.71	\$30.00	\$30.00
500	\$26.63	\$26.63	\$30.00	\$30.00
600	\$32.20	\$31.54	\$31.47	\$31.47
700	\$37.77	\$36.46	\$37.06	\$33.89
800	\$43.34	\$41.38	\$42.66	\$36.31
900	\$48.92	\$46.29	\$48.25	\$38.73
1000	\$54.49	\$51.21	\$53.84	\$41.15
1100	\$60.06	\$56.12	\$59.43	\$43.57
1200	\$65.63	\$61.04	\$65.02	\$45.99
1300	\$71.20	\$65.96	\$70.62	\$48.41
1400	\$76.78	\$70.87	\$76.21	\$50.83
1500	\$82.35	\$75.79	\$81.80	\$53.25
1600	\$87.92	\$80.70	\$87.39	\$55.67
1700	\$93.49	\$85.62	\$92.98	\$58.09
1800	\$99.06	\$90.54	\$98.58	\$60.51
1900	\$99.10	\$95.45	\$104.17	\$62.93
2000	\$99.10	\$99.10	\$109.76	\$65.35
2100	\$99.10	\$99.10	\$115.35	\$67.77
2200	\$99.10	\$99.10	\$120.94	\$70.19
2300	\$99.10	\$99.10	\$126.54	\$72.61
2400	\$99.10	\$99.10	\$132.13	\$75.03
2500	\$99.10	\$99.10	\$137.72	\$77.45

XVI. BILLS UNDER RATES R AND R-H (TARIFF 1-27-2002)

Standard Residential Billing Amounts for Varied Usage Under Rates R and RH					
Usage/Mo (kWh)	Rate R Summer	Rate R Winter	Rate R-H Summer	Rate R-H Winter	Usage/Mo (kWh)
100	\$17.41	\$17.41	\$17.38	\$17.38	100
200	\$29.70	\$29.70	\$29.64	\$29.64	200
300	\$41.99	\$41.99	\$41.90	\$41.90	300
400	\$54.28	\$54.28	\$54.16	\$54.16	400
500	\$66.57	\$66.57	\$66.42	\$66.42	500
600	\$85.62	\$78.86	\$78.68	\$78.68	600
700	\$99.55	\$91.15	\$97.78	\$89.85	700
800	\$113.48	\$103.44	\$111.76	\$95.90	800
900	\$127.41	\$115.73	\$125.74	\$101.95	900
1000	\$141.34	\$128.02	\$139.72	\$108.00	1000
1100	\$155.27	\$140.31	\$153.70	\$114.05	1100
1200	\$169.20	\$152.60	\$167.68	\$120.10	1200
1300	\$183.13	\$164.89	\$181.66	\$126.15	1300
1400	\$197.06	\$177.18	\$195.64	\$132.20	1400
1500	\$210.99	\$189.47	\$209.62	\$138.25	1500
1600	\$224.92	\$201.76	\$223.60	\$144.30	1600
1700	\$238.85	\$214.05	\$237.58	\$150.35	1700
1800	\$252.78	\$226.34	\$251.56	\$156.40	1800
1900	\$266.71	\$238.63	\$265.54	\$162.45	1900
2000	\$280.64	\$250.92	\$279.52	\$168.50	2000
2100	\$294.57	\$263.21	\$293.50	\$174.55	2100
2200	\$308.50	\$275.50	\$307.48	\$180.60	2200
2300	\$322.43	\$287.79	\$321.46	\$186.65	2300
2400	\$336.36	\$300.08	\$335.44	\$192.70	2400
2500	\$350.29	\$312.37	\$349.42	\$198.75	2500

XVII. BILLS IN CAP RATE RJ AND CAP RATE RHJ

Usage/Mo (kWh)	CAP Rate RJ Summer	CAP Rate RJ Winter	CAP Rate RHJ Summer	CAP Rate RHJ Winter	Usage/Mo (kWh)
100	\$11.02	\$11.02	\$11.04	\$11.04	100
200	\$16.92	\$16.92	\$16.96	\$16.96	200
300	\$22.82	\$22.82	\$22.88	\$22.88	300
400	\$28.72	\$28.72	\$28.80	\$28.80	400
500	\$34.62	\$34.62	\$34.72	\$34.72	500
600	\$51.95	\$51.95	\$40.64	\$40.64	600
700	\$64.16	\$64.16	\$58.02	\$51.68	700
800	\$76.37	\$76.37	\$70.28	\$57.60	800
900	\$88.58	\$88.58	\$82.54	\$63.52	900
1000	\$100.79	\$100.79	\$94.80	\$69.44	1000
1100	\$113.00	\$113.00	\$107.06	\$75.36	1100
1200	\$125.21	\$125.21	\$119.32	\$81.28	1200
1300	\$137.42	\$137.42	\$131.58	\$87.20	1300
1400	\$149.63	\$149.63	\$143.84	\$93.12	1400
1500	\$161.84	\$161.84	\$156.10	\$99.04	1500
1600	\$174.05	\$174.05	\$168.36	\$104.96	1600
1700	\$186.26	\$186.26	\$180.62	\$110.88	1700
1800	\$198.47	\$198.47	\$192.88	\$116.80	1800
1900	\$210.68	\$210.68	\$205.14	\$122.72	1900
2000	\$222.89	\$222.89	\$217.40	\$128.64	2000
2100	\$235.10	\$235.10	\$229.66	\$134.56	2100
2200	\$247.31	\$247.31	\$241.92	\$140.48	2200
2300	\$259.52	\$259.52	\$254.18	\$146.40	2300
2400	\$271.73	\$271.73	\$266.44	\$152.32	2400
2500	\$283.94	\$283.94	\$278.70	\$158.24	2500

XVIII. RATE COMPARISON CHARTS

Summer, Regular Residential Service (Based on Rate R)

Family Size =4

Usage/Mo (KWh)	Rate R	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.41	\$11.02	\$12.00	\$12.00	\$12.00	\$12.00	\$6.18	\$9.27	\$12.36	\$15.44	100
200	\$29.70	\$16.92	\$12.00	\$12.00	\$12.00	\$12.00	\$6.18	\$9.27	\$12.36	\$15.44	200
300	\$41.99	\$22.82	\$16.80	\$16.80	\$16.80	\$16.80	\$6.18	\$9.27	\$12.36	\$15.44	300
400	\$54.28	\$28.72	\$21.71	\$21.71	\$21.71	\$21.71	\$6.18	\$9.27	\$12.36	\$15.44	400
500	\$66.57	\$34.62	\$23.53	\$26.63	\$26.63	\$26.63	\$6.18	\$9.27	\$12.36	\$15.44	500
600	\$85.62	\$51.95	\$23.53	\$32.20	\$32.20	\$32.20	\$6.18	\$9.27	\$12.36	\$15.44	600
700	\$99.55	\$64.16	\$23.53	\$35.30	\$37.77	\$37.77	\$6.18	\$9.27	\$12.36	\$15.44	700
800	\$113.48	\$76.37	\$23.53	\$35.30	\$43.34	\$43.34	\$6.18	\$9.27	\$12.36	\$15.44	800
900	\$127.41	\$88.58	\$23.53	\$35.30	\$47.07	\$48.92	\$6.18	\$9.27	\$12.36	\$15.44	900
1000	\$141.34	\$100.79	\$23.53	\$35.30	\$47.07	\$54.49	\$6.18	\$9.27	\$12.36	\$15.44	1000
1100	\$155.27	\$113.00	\$23.53	\$35.30	\$47.07	\$58.83	\$6.18	\$9.27	\$12.36	\$15.44	1100
1200	\$169.20	\$125.21	\$23.53	\$35.30	\$47.07	\$58.83	\$6.18	\$9.27	\$12.36	\$15.44	1200
1300	\$183.13	\$137.42	\$23.53	\$35.30	\$47.07	\$58.83	\$6.18	\$9.27	\$12.36	\$15.44	1300
1400	\$197.06	\$149.63	\$23.53	\$35.30	\$47.07	\$58.83	\$6.18	\$9.27	\$12.36	\$15.44	1400
1500	\$210.99	\$161.84	\$23.53	\$35.30	\$47.07	\$58.83	\$6.18	\$9.27	\$12.36	\$15.44	1500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

Winter, Regular Residential Service (Based on Rate R)

Family Size =4

Usage/Mo (KWh)	Rate R	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.41	\$11.02	\$12.00	\$12.00	\$12.00	\$12.00	\$6.18	\$9.27	\$12.36	\$15.44	100
200	\$29.70	\$16.92	\$12.00	\$12.00	\$12.00	\$12.00	\$6.18	\$9.27	\$12.36	\$15.44	200
300	\$41.99	\$22.82	\$16.80	\$16.80	\$16.80	\$16.80	\$6.18	\$9.27	\$12.36	\$15.44	300
400	\$54.28	\$28.72	\$21.71	\$21.71	\$21.71	\$21.71	\$6.18	\$9.27	\$12.36	\$15.44	400
500	\$66.57	\$34.62	\$23.53	\$26.63	\$26.63	\$26.63	\$6.18	\$9.27	\$12.36	\$15.44	500
600	\$78.86	\$51.95	\$23.53	\$31.54	\$31.54	\$31.54	\$6.18	\$9.27	\$12.36	\$15.44	600
700	\$91.15	\$64.16	\$23.53	\$35.30	\$36.46	\$36.46	\$6.18	\$9.27	\$12.36	\$15.44	700
800	\$103.44	\$76.37	\$23.53	\$35.30	\$41.38	\$41.38	\$6.18	\$9.27	\$12.36	\$15.44	800
900	\$115.73	\$88.58	\$23.53	\$35.30	\$46.29	\$46.29	\$6.18	\$9.27	\$12.36	\$15.44	900
1000	\$128.02	\$100.79	\$23.53	\$35.30	\$47.07	\$51.21	\$6.18	\$9.27	\$12.36	\$15.44	1000
1100	\$140.31	\$113.00	\$23.53	\$35.30	\$47.07	\$52.95	\$6.18	\$9.27	\$12.36	\$15.44	1100
1200	\$152.60	\$125.21	\$23.53	\$35.30	\$47.07	\$52.95	\$6.18	\$9.27	\$12.36	\$15.44	1200
1300	\$164.89	\$137.42	\$23.53	\$35.30	\$47.07	\$52.95	\$6.18	\$9.27	\$12.36	\$15.44	1300
1400	\$177.18	\$149.63	\$23.53	\$35.30	\$47.07	\$52.95	\$6.18	\$9.27	\$12.36	\$15.44	1400
1500	\$189.47	\$161.84	\$23.53	\$35.30	\$47.07	\$52.95	\$6.18	\$9.27	\$12.36	\$15.44	1500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

Summer, Regular Residential Service (Based on Rate R)

Family Size =5

Usage/Mo (KWh)	Rate R	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.41	\$11.02	\$12.00	\$12.00	\$12.00	\$12.00	\$7.23	\$10.85	\$14.47	\$18.09	100
200	\$29.70	\$16.92	\$12.00	\$12.00	\$12.00	\$12.00	\$7.23	\$10.85	\$14.47	\$18.09	200
300	\$41.99	\$22.82	\$16.80	\$16.80	\$16.80	\$16.80	\$7.23	\$10.85	\$14.47	\$18.09	300
400	\$54.28	\$28.72	\$21.71	\$21.71	\$21.71	\$21.71	\$7.23	\$10.85	\$14.47	\$18.09	400
500	\$66.57	\$34.62	\$26.63	\$26.63	\$26.63	\$26.63	\$7.23	\$10.85	\$14.47	\$18.09	500
600	\$85.62	\$51.95	\$27.56	\$32.20	\$32.20	\$32.20	\$7.23	\$10.85	\$14.47	\$18.09	600
700	\$99.55	\$64.16	\$27.56	\$37.77	\$37.77	\$37.77	\$7.23	\$10.85	\$14.47	\$18.09	700
800	\$113.48	\$76.37	\$27.56	\$41.34	\$43.34	\$43.34	\$7.23	\$10.85	\$14.47	\$18.09	800
900	\$127.41	\$88.58	\$27.56	\$41.34	\$48.92	\$48.92	\$7.23	\$10.85	\$14.47	\$18.09	900
1000	\$141.34	\$100.79	\$27.56	\$41.34	\$54.49	\$54.49	\$7.23	\$10.85	\$14.47	\$18.09	1000
1100	\$155.27	\$113.00	\$27.56	\$41.34	\$55.12	\$60.06	\$7.23	\$10.85	\$14.47	\$18.09	1100
1200	\$169.20	\$125.21	\$27.56	\$41.34	\$55.12	\$65.63	\$7.23	\$10.85	\$14.47	\$18.09	1200
1300	\$183.13	\$137.42	\$27.56	\$41.34	\$55.12	\$68.90	\$7.23	\$10.85	\$14.47	\$18.09	1300
1400	\$197.06	\$149.63	\$27.56	\$41.34	\$55.12	\$68.90	\$7.23	\$10.85	\$14.47	\$18.09	1400
1500	\$210.99	\$161.84	\$27.56	\$41.34	\$55.12	\$68.90	\$7.23	\$10.85	\$14.47	\$18.09	1500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

Winter, Regular Residential Service (Based on Rate R)

Family Size =5

Usage/Mo (KWh)	Rate R	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.41	\$11.02	\$12.00	\$12.00	\$12.00	\$12.00	\$7.23	\$10.85	\$14.47	\$18.09	100
200	\$29.70	\$16.92	\$12.00	\$12.00	\$12.00	\$12.00	\$7.23	\$10.85	\$14.47	\$18.09	200
300	\$41.99	\$22.82	\$16.80	\$16.80	\$16.80	\$16.80	\$7.23	\$10.85	\$14.47	\$18.09	300
400	\$54.28	\$28.72	\$21.71	\$21.71	\$21.71	\$21.71	\$7.23	\$10.85	\$14.47	\$18.09	400
500	\$66.57	\$34.62	\$26.63	\$26.63	\$26.63	\$26.63	\$7.23	\$10.85	\$14.47	\$18.09	500
600	\$78.86	\$51.95	\$27.56	\$31.54	\$31.54	\$31.54	\$7.23	\$10.85	\$14.47	\$18.09	600
700	\$91.15	\$64.16	\$27.56	\$36.46	\$36.46	\$36.46	\$7.23	\$10.85	\$14.47	\$18.09	700
800	\$103.44	\$76.37	\$27.56	\$41.34	\$41.38	\$41.38	\$7.23	\$10.85	\$14.47	\$18.09	800
900	\$115.73	\$88.58	\$27.56	\$41.34	\$46.29	\$46.29	\$7.23	\$10.85	\$14.47	\$18.09	900
1000	\$128.02	\$100.79	\$27.56	\$41.34	\$51.21	\$51.21	\$7.23	\$10.85	\$14.47	\$18.09	1000
1100	\$140.31	\$113.00	\$27.56	\$41.34	\$55.12	\$56.12	\$7.23	\$10.85	\$14.47	\$18.09	1100
1200	\$152.60	\$125.21	\$27.56	\$41.34	\$55.12	\$61.04	\$7.23	\$10.85	\$14.47	\$18.09	1200
1300	\$164.89	\$137.42	\$27.56	\$41.34	\$55.12	\$65.96	\$7.23	\$10.85	\$14.47	\$18.09	1300
1400	\$177.18	\$149.63	\$27.56	\$41.34	\$55.12	\$68.90	\$7.23	\$10.85	\$14.47	\$18.09	1400
1500	\$189.47	\$161.84	\$27.56	\$41.34	\$55.12	\$68.90	\$7.23	\$10.85	\$14.47	\$18.09	1500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

Summer, Regular Residential Service (Based on Rate R)

Family Size =6

Usage/Mo (KWh)	Rate R	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.41	\$11.02	\$12.00	\$12.00	\$12.00	\$12.00	\$8.29	\$12.44	\$16.58	\$20.73	100
200	\$29.70	\$16.92	\$12.00	\$12.00	\$12.00	\$12.00	\$8.29	\$12.44	\$16.58	\$20.73	200
300	\$41.99	\$22.82	\$16.80	\$16.80	\$16.80	\$16.80	\$8.29	\$12.44	\$16.58	\$20.73	300
400	\$54.28	\$28.72	\$21.71	\$21.71	\$21.71	\$21.71	\$8.29	\$12.44	\$16.58	\$20.73	400
500	\$66.57	\$34.62	\$26.63	\$26.63	\$26.63	\$26.63	\$8.29	\$12.44	\$16.58	\$20.73	500
600	\$85.62	\$51.95	\$31.59	\$32.20	\$32.20	\$32.20	\$8.29	\$12.44	\$16.58	\$20.73	600
700	\$99.55	\$64.16	\$31.59	\$37.77	\$37.77	\$37.77	\$8.29	\$12.44	\$16.58	\$20.73	700
800	\$113.48	\$76.37	\$31.59	\$43.34	\$43.34	\$43.34	\$8.29	\$12.44	\$16.58	\$20.73	800
900	\$127.41	\$88.58	\$31.59	\$47.38	\$48.92	\$48.92	\$8.29	\$12.44	\$16.58	\$20.73	900
1000	\$141.34	\$100.79	\$31.59	\$47.38	\$54.49	\$54.49	\$8.29	\$12.44	\$16.58	\$20.73	1000
1100	\$155.27	\$113.00	\$31.59	\$47.38	\$60.06	\$60.06	\$8.29	\$12.44	\$16.58	\$20.73	1100
1200	\$169.20	\$125.21	\$31.59	\$47.38	\$63.17	\$65.63	\$8.29	\$12.44	\$16.58	\$20.73	1200
1300	\$183.13	\$137.42	\$31.59	\$47.38	\$63.17	\$71.20	\$8.29	\$12.44	\$16.58	\$20.73	1300
1400	\$197.06	\$149.63	\$31.59	\$47.38	\$63.17	\$76.78	\$8.29	\$12.44	\$16.58	\$20.73	1400
1500	\$210.99	\$161.84	\$31.59	\$47.38	\$63.17	\$78.97	\$8.29	\$12.44	\$16.58	\$20.73	1500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

Winter, Regular Residential Service (Based on Rate R)

Family Size =6

Usage/Mo (KWh)	Rate R	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.41	\$11.02	\$12.00	\$12.00	\$12.00	\$12.00	\$8.29	\$12.44	\$16.58	\$20.73	100
200	\$29.70	\$16.92	\$12.00	\$12.00	\$12.00	\$12.00	\$8.29	\$12.44	\$16.58	\$20.73	200
300	\$41.99	\$22.82	\$16.80	\$16.80	\$16.80	\$16.80	\$8.29	\$12.44	\$16.58	\$20.73	300
400	\$54.28	\$28.72	\$21.71	\$21.71	\$21.71	\$21.71	\$8.29	\$12.44	\$16.58	\$20.73	400
500	\$66.57	\$34.62	\$26.63	\$26.63	\$26.63	\$26.63	\$8.29	\$12.44	\$16.58	\$20.73	500
600	\$78.86	\$51.95	\$31.54	\$31.54	\$31.54	\$31.54	\$8.29	\$12.44	\$16.58	\$20.73	600
700	\$91.15	\$64.16	\$31.59	\$36.46	\$36.46	\$36.46	\$8.29	\$12.44	\$16.58	\$20.73	700
800	\$103.44	\$76.37	\$31.59	\$41.38	\$41.38	\$41.38	\$8.29	\$12.44	\$16.58	\$20.73	800
900	\$115.73	\$88.58	\$31.59	\$46.29	\$46.29	\$46.29	\$8.29	\$12.44	\$16.58	\$20.73	900
1000	\$128.02	\$100.79	\$31.59	\$47.38	\$51.21	\$51.21	\$8.29	\$12.44	\$16.58	\$20.73	1000
1100	\$140.31	\$113.00	\$31.59	\$47.38	\$56.12	\$56.12	\$8.29	\$12.44	\$16.58	\$20.73	1100
1200	\$152.60	\$125.21	\$31.59	\$47.38	\$61.04	\$61.04	\$8.29	\$12.44	\$16.58	\$20.73	1200
1300	\$164.89	\$137.42	\$31.59	\$47.38	\$63.17	\$65.96	\$8.29	\$12.44	\$16.58	\$20.73	1300
1400	\$177.18	\$149.63	\$31.59	\$47.38	\$63.17	\$70.87	\$8.29	\$12.44	\$16.58	\$20.73	1400
1500	\$189.47	\$161.84	\$31.59	\$47.38	\$63.17	\$75.79	\$8.29	\$12.44	\$16.58	\$20.73	1500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

Summer, Residential Electric Heat Service (Based on Rate R-H)

Family Size =4

Usage/Mo (KWh)	Rate R-H	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.38	\$11.04	\$30.00	\$30.00	\$30.00	\$30.00	\$16.47	\$24.71	\$32.95	\$41.18	100
200	\$29.64	\$16.96	\$30.00	\$30.00	\$30.00	\$30.00	\$16.47	\$24.71	\$32.95	\$41.18	200
300	\$41.90	\$22.88	\$30.00	\$30.00	\$30.00	\$30.00	\$16.47	\$24.71	\$32.95	\$41.18	300
400	\$54.16	\$28.80	\$30.00	\$30.00	\$30.00	\$30.00	\$16.47	\$24.71	\$32.95	\$41.18	400
500	\$66.42	\$34.72	\$30.00	\$30.00	\$30.00	\$30.00	\$16.47	\$24.71	\$32.95	\$41.18	500
600	\$78.68	\$40.64	\$31.47	\$31.47	\$31.47	\$31.47	\$16.47	\$24.71	\$32.95	\$41.18	600
700	\$97.78	\$58.02	\$37.06	\$37.06	\$37.06	\$37.06	\$16.47	\$24.71	\$32.95	\$41.18	700
800	\$111.76	\$70.28	\$42.66	\$42.66	\$42.66	\$42.66	\$16.47	\$24.71	\$32.95	\$41.18	800
900	\$125.74	\$82.54	\$44.13	\$48.25	\$48.25	\$48.25	\$16.47	\$24.71	\$32.95	\$41.18	900
1000	\$139.72	\$94.80	\$44.13	\$53.84	\$53.84	\$53.84	\$16.47	\$24.71	\$32.95	\$41.18	1000
1100	\$153.70	\$107.06	\$44.13	\$59.43	\$59.43	\$59.43	\$16.47	\$24.71	\$32.95	\$41.18	1100
1200	\$167.68	\$119.32	\$44.13	\$65.02	\$65.02	\$65.02	\$16.47	\$24.71	\$32.95	\$41.18	1200
1300	\$181.66	\$131.58	\$44.13	\$66.19	\$70.62	\$70.62	\$16.47	\$24.71	\$32.95	\$41.18	1300
1400	\$195.64	\$143.84	\$44.13	\$66.19	\$76.21	\$76.21	\$16.47	\$24.71	\$32.95	\$41.18	1400
1500	\$209.62	\$156.10	\$44.13	\$66.19	\$81.80	\$81.80	\$16.47	\$24.71	\$32.95	\$41.18	1500
1600	\$223.60	\$168.36	\$44.13	\$66.19	\$87.39	\$87.39	\$16.47	\$24.71	\$32.95	\$41.18	1600
1700	\$237.58	\$180.62	\$44.13	\$66.19	\$88.25	\$92.98	\$16.47	\$24.71	\$32.95	\$41.18	1700
1800	\$251.56	\$192.88	\$44.13	\$66.19	\$88.25	\$98.58	\$16.47	\$24.71	\$32.95	\$41.18	1800
1900	\$265.54	\$205.14	\$44.13	\$66.19	\$88.25	\$104.17	\$16.47	\$24.71	\$32.95	\$41.18	1900
2000	\$279.52	\$217.40	\$44.13	\$66.19	\$88.25	\$109.76	\$16.47	\$24.71	\$32.95	\$41.18	2000
2100	\$293.50	\$229.66	\$44.13	\$66.19	\$88.25	\$110.31	\$16.47	\$24.71	\$32.95	\$41.18	2100
2200	\$307.48	\$241.92	\$44.13	\$66.19	\$88.25	\$110.31	\$16.47	\$24.71	\$32.95	\$41.18	2200
2300	\$321.46	\$254.18	\$44.13	\$66.19	\$88.25	\$110.31	\$16.47	\$24.71	\$32.95	\$41.18	2300
2400	\$335.44	\$266.44	\$44.13	\$66.19	\$88.25	\$110.31	\$16.47	\$24.71	\$32.95	\$41.18	2400
2500	\$349.42	\$278.70	\$44.13	\$66.19	\$88.25	\$110.31	\$16.47	\$24.71	\$32.95	\$41.18	2500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

Winter, Residential Electric Heat Service (Based on Rate R-H)

Family Size =4

Usage/Mo (KWh)	Rate R-H	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.38	\$11.04	\$30.00	\$30.00	\$30.00	\$30.00	\$16.47	\$24.71	\$32.95	\$41.18	100
200	\$29.64	\$16.96	\$30.00	\$30.00	\$30.00	\$30.00	\$16.47	\$24.71	\$32.95	\$41.18	200
300	\$41.90	\$22.88	\$30.00	\$30.00	\$30.00	\$30.00	\$16.47	\$24.71	\$32.95	\$41.18	300
400	\$54.16	\$28.80	\$30.00	\$30.00	\$30.00	\$30.00	\$16.47	\$24.71	\$32.95	\$41.18	400
500	\$66.42	\$34.72	\$30.00	\$30.00	\$30.00	\$30.00	\$16.47	\$24.71	\$32.95	\$41.18	500
600	\$78.68	\$40.64	\$31.47	\$31.47	\$31.47	\$31.47	\$16.47	\$24.71	\$32.95	\$41.18	600
700	\$89.85	\$51.68	\$33.89	\$33.89	\$33.89	\$33.89	\$16.47	\$24.71	\$32.95	\$41.18	700
800	\$95.90	\$57.60	\$36.31	\$36.31	\$36.31	\$36.31	\$16.47	\$24.71	\$32.95	\$41.18	800
900	\$101.95	\$63.52	\$38.73	\$38.73	\$38.73	\$38.73	\$16.47	\$24.71	\$32.95	\$41.18	900
1000	\$108.00	\$69.44	\$41.15	\$41.15	\$41.15	\$41.15	\$16.47	\$24.71	\$32.95	\$41.18	1000
1100	\$114.05	\$75.36	\$43.57	\$43.57	\$43.57	\$43.57	\$16.47	\$24.71	\$32.95	\$41.18	1100
1200	\$120.10	\$81.28	\$44.13	\$45.99	\$45.99	\$45.99	\$16.47	\$24.71	\$32.95	\$41.18	1200
1300	\$126.15	\$87.20	\$44.13	\$48.41	\$48.41	\$48.41	\$16.47	\$24.71	\$32.95	\$41.18	1300
1400	\$132.20	\$93.12	\$44.13	\$50.83	\$50.83	\$50.83	\$16.47	\$24.71	\$32.95	\$41.18	1400
1500	\$138.25	\$99.04	\$44.13	\$53.25	\$53.25	\$53.25	\$16.47	\$24.71	\$32.95	\$41.18	1500
1600	\$144.30	\$104.96	\$44.13	\$55.67	\$55.67	\$55.67	\$16.47	\$24.71	\$32.95	\$41.18	1600
1700	\$150.35	\$110.88	\$44.13	\$58.09	\$58.09	\$58.09	\$16.47	\$24.71	\$32.95	\$41.18	1700
1800	\$156.40	\$116.80	\$44.13	\$60.51	\$60.51	\$60.51	\$16.47	\$24.71	\$32.95	\$41.18	1800
1900	\$162.45	\$122.72	\$44.13	\$62.93	\$62.93	\$62.93	\$16.47	\$24.71	\$32.95	\$41.18	1900
2000	\$168.50	\$128.64	\$44.13	\$65.35	\$65.35	\$65.35	\$16.47	\$24.71	\$32.95	\$41.18	2000
2100	\$174.55	\$134.56	\$44.13	\$66.19	\$67.77	\$67.77	\$16.47	\$24.71	\$32.95	\$41.18	2100
2200	\$180.60	\$140.48	\$44.13	\$66.19	\$70.19	\$70.19	\$16.47	\$24.71	\$32.95	\$41.18	2200
2300	\$186.65	\$146.40	\$44.13	\$66.19	\$72.61	\$72.61	\$16.47	\$24.71	\$32.95	\$41.18	2300
2400	\$192.70	\$152.32	\$44.13	\$66.19	\$75.03	\$75.03	\$16.47	\$24.71	\$32.95	\$41.18	2400
2500	\$198.75	\$158.24	\$44.13	\$66.19	\$77.45	\$77.45	\$16.47	\$24.71	\$32.95	\$41.18	2500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

Summer, Residential Electric Heat Service (Based on Rate R-H)

Family Size =5

Usage/Mo (KWh)	Rate R-H	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.38	\$11.04	\$30.00	\$30.00	\$30.00	\$30.00	\$19.29	\$28.94	\$38.58	\$48.23	100
200	\$29.64	\$16.96	\$30.00	\$30.00	\$30.00	\$30.00	\$19.29	\$28.94	\$38.58	\$48.23	200
300	\$41.90	\$22.88	\$30.00	\$30.00	\$30.00	\$30.00	\$19.29	\$28.94	\$38.58	\$48.23	300
400	\$54.16	\$28.80	\$30.00	\$30.00	\$30.00	\$30.00	\$19.29	\$28.94	\$38.58	\$48.23	400
500	\$66.42	\$34.72	\$30.00	\$30.00	\$30.00	\$30.00	\$19.29	\$28.94	\$38.58	\$48.23	500
600	\$78.68	\$40.64	\$31.47	\$31.47	\$31.47	\$31.47	\$19.29	\$28.94	\$38.58	\$48.23	600
700	\$97.78	\$58.02	\$37.06	\$37.06	\$37.06	\$37.06	\$19.29	\$28.94	\$38.58	\$48.23	700
800	\$111.76	\$70.28	\$42.66	\$42.66	\$42.66	\$42.66	\$19.29	\$28.94	\$38.58	\$48.23	800
900	\$125.74	\$82.54	\$48.25	\$48.25	\$48.25	\$48.25	\$19.29	\$28.94	\$38.58	\$48.23	900
1000	\$139.72	\$94.80	\$51.68	\$53.84	\$53.84	\$53.84	\$19.29	\$28.94	\$38.58	\$48.23	1000
1100	\$153.70	\$107.06	\$51.68	\$59.43	\$59.43	\$59.43	\$19.29	\$28.94	\$38.58	\$48.23	1100
1200	\$167.68	\$119.32	\$51.68	\$65.02	\$65.02	\$65.02	\$19.29	\$28.94	\$38.58	\$48.23	1200
1300	\$181.66	\$131.58	\$51.68	\$70.62	\$70.62	\$70.62	\$19.29	\$28.94	\$38.58	\$48.23	1300
1400	\$195.64	\$143.84	\$51.68	\$76.21	\$76.21	\$76.21	\$19.29	\$28.94	\$38.58	\$48.23	1400
1500	\$209.62	\$156.10	\$51.68	\$77.51	\$81.80	\$81.80	\$19.29	\$28.94	\$38.58	\$48.23	1500
1600	\$223.60	\$168.36	\$51.68	\$77.51	\$87.39	\$87.39	\$19.29	\$28.94	\$38.58	\$48.23	1600
1700	\$237.58	\$180.62	\$51.68	\$77.51	\$92.98	\$92.98	\$19.29	\$28.94	\$38.58	\$48.23	1700
1800	\$251.56	\$192.88	\$51.68	\$77.51	\$98.58	\$98.58	\$19.29	\$28.94	\$38.58	\$48.23	1800
1900	\$265.54	\$205.14	\$51.68	\$77.51	\$103.35	\$104.17	\$19.29	\$28.94	\$38.58	\$48.23	1900
2000	\$279.52	\$217.40	\$51.68	\$77.51	\$103.35	\$109.76	\$19.29	\$28.94	\$38.58	\$48.23	2000
2100	\$293.50	\$229.66	\$51.68	\$77.51	\$103.35	\$115.35	\$19.29	\$28.94	\$38.58	\$48.23	2100
2200	\$307.48	\$241.92	\$51.68	\$77.51	\$103.35	\$120.94	\$19.29	\$28.94	\$38.58	\$48.23	2200
2300	\$321.46	\$254.18	\$51.68	\$77.51	\$103.35	\$126.54	\$19.29	\$28.94	\$38.58	\$48.23	2300
2400	\$335.44	\$266.44	\$51.68	\$77.51	\$103.35	\$129.19	\$19.29	\$28.94	\$38.58	\$48.23	2400
2500	\$349.42	\$278.70	\$51.68	\$77.51	\$103.35	\$129.19	\$19.29	\$28.94	\$38.58	\$48.23	2500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

Winter, Residential Electric Heat Service (Based on Rate R-H)

Family Size =5

Usage/Mo (KWh)	Rate R-H	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.38	\$11.04	\$30.00	\$30.00	\$30.00	\$30.00	\$19.29	\$28.94	\$38.58	\$48.23	100
200	\$29.64	\$16.96	\$30.00	\$30.00	\$30.00	\$30.00	\$19.29	\$28.94	\$38.58	\$48.23	200
300	\$41.90	\$22.88	\$30.00	\$30.00	\$30.00	\$30.00	\$19.29	\$28.94	\$38.58	\$48.23	300
400	\$54.16	\$28.80	\$30.00	\$30.00	\$30.00	\$30.00	\$19.29	\$28.94	\$38.58	\$48.23	400
500	\$66.42	\$34.72	\$30.00	\$30.00	\$30.00	\$30.00	\$19.29	\$28.94	\$38.58	\$48.23	500
600	\$78.68	\$40.64	\$31.47	\$31.47	\$31.47	\$31.47	\$19.29	\$28.94	\$38.58	\$48.23	600
700	\$89.85	\$51.68	\$33.89	\$33.89	\$33.89	\$33.89	\$19.29	\$28.94	\$38.58	\$48.23	700
800	\$95.90	\$57.60	\$36.31	\$36.31	\$36.31	\$36.31	\$19.29	\$28.94	\$38.58	\$48.23	800
900	\$101.95	\$63.52	\$38.73	\$38.73	\$38.73	\$38.73	\$19.29	\$28.94	\$38.58	\$48.23	900
1000	\$108.00	\$69.44	\$41.15	\$41.15	\$41.15	\$41.15	\$19.29	\$28.94	\$38.58	\$48.23	1000
1100	\$114.05	\$75.36	\$43.57	\$43.57	\$43.57	\$43.57	\$19.29	\$28.94	\$38.58	\$48.23	1100
1200	\$120.10	\$81.28	\$45.99	\$45.99	\$45.99	\$45.99	\$19.29	\$28.94	\$38.58	\$48.23	1200
1300	\$126.15	\$87.20	\$48.41	\$48.41	\$48.41	\$48.41	\$19.29	\$28.94	\$38.58	\$48.23	1300
1400	\$132.20	\$93.12	\$50.83	\$50.83	\$50.83	\$50.83	\$19.29	\$28.94	\$38.58	\$48.23	1400
1500	\$138.25	\$99.04	\$51.68	\$53.25	\$53.25	\$53.25	\$19.29	\$28.94	\$38.58	\$48.23	1500
1600	\$144.30	\$104.96	\$51.68	\$55.67	\$55.67	\$55.67	\$19.29	\$28.94	\$38.58	\$48.23	1600
1700	\$150.35	\$110.88	\$51.68	\$58.09	\$58.09	\$58.09	\$19.29	\$28.94	\$38.58	\$48.23	1700
1800	\$156.40	\$116.80	\$51.68	\$60.51	\$60.51	\$60.51	\$19.29	\$28.94	\$38.58	\$48.23	1800
1900	\$162.45	\$122.72	\$51.68	\$62.93	\$62.93	\$62.93	\$19.29	\$28.94	\$38.58	\$48.23	1900
2000	\$168.50	\$128.64	\$51.68	\$65.35	\$65.35	\$65.35	\$19.29	\$28.94	\$38.58	\$48.23	2000
2100	\$174.55	\$134.56	\$51.68	\$67.77	\$67.77	\$67.77	\$19.29	\$28.94	\$38.58	\$48.23	2100
2200	\$180.60	\$140.48	\$51.68	\$70.19	\$70.19	\$70.19	\$19.29	\$28.94	\$38.58	\$48.23	2200
2300	\$186.65	\$146.40	\$51.68	\$72.61	\$72.61	\$72.61	\$19.29	\$28.94	\$38.58	\$48.23	2300
2400	\$192.70	\$152.32	\$51.68	\$75.03	\$75.03	\$75.03	\$19.29	\$28.94	\$38.58	\$48.23	2400
2500	\$198.75	\$158.24	\$51.68	\$77.45	\$77.45	\$77.45	\$19.29	\$28.94	\$38.58	\$48.23	2500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

Summer, Residential Electric Heat Service (Based on Rate R-H)

Family Size =6

Usage/Mo (KWh)	Rate R-H	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.38	\$11.04	\$30.00	\$30.00	\$30.00	\$30.00	\$22.11	\$33.17	\$44.22	\$55.28	100
200	\$29.64	\$16.96	\$30.00	\$30.00	\$30.00	\$30.00	\$22.11	\$33.17	\$44.22	\$55.28	200
300	\$41.90	\$22.88	\$30.00	\$30.00	\$30.00	\$30.00	\$22.11	\$33.17	\$44.22	\$55.28	300
400	\$54.16	\$28.80	\$30.00	\$30.00	\$30.00	\$30.00	\$22.11	\$33.17	\$44.22	\$55.28	400
500	\$66.42	\$34.72	\$30.00	\$30.00	\$30.00	\$30.00	\$22.11	\$33.17	\$44.22	\$55.28	500
600	\$78.68	\$40.64	\$31.47	\$31.47	\$31.47	\$31.47	\$22.11	\$33.17	\$44.22	\$55.28	600
700	\$97.78	\$58.02	\$37.06	\$37.06	\$37.06	\$37.06	\$22.11	\$33.17	\$44.22	\$55.28	700
800	\$111.76	\$70.28	\$42.66	\$42.66	\$42.66	\$42.66	\$22.11	\$33.17	\$44.22	\$55.28	800
900	\$125.74	\$82.54	\$48.25	\$48.25	\$48.25	\$48.25	\$22.11	\$33.17	\$44.22	\$55.28	900
1000	\$139.72	\$94.80	\$53.84	\$53.84	\$53.84	\$53.84	\$22.11	\$33.17	\$44.22	\$55.28	1000
1100	\$153.70	\$107.06	\$59.23	\$59.43	\$59.43	\$59.43	\$22.11	\$33.17	\$44.22	\$55.28	1100
1200	\$167.68	\$119.32	\$59.23	\$65.02	\$65.02	\$65.02	\$22.11	\$33.17	\$44.22	\$55.28	1200
1300	\$181.66	\$131.58	\$59.23	\$70.62	\$70.62	\$70.62	\$22.11	\$33.17	\$44.22	\$55.28	1300
1400	\$195.64	\$143.84	\$59.23	\$76.21	\$76.21	\$76.21	\$22.11	\$33.17	\$44.22	\$55.28	1400
1500	\$209.62	\$156.10	\$59.23	\$81.80	\$81.80	\$81.80	\$22.11	\$33.17	\$44.22	\$55.28	1500
1600	\$223.60	\$168.36	\$59.23	\$87.39	\$87.39	\$87.39	\$22.11	\$33.17	\$44.22	\$55.28	1600
1700	\$237.58	\$180.62	\$59.23	\$88.84	\$92.98	\$92.98	\$22.11	\$33.17	\$44.22	\$55.28	1700
1800	\$251.56	\$192.88	\$59.23	\$88.84	\$98.58	\$98.58	\$22.11	\$33.17	\$44.22	\$55.28	1800
1900	\$265.54	\$205.14	\$59.23	\$88.84	\$104.17	\$104.17	\$22.11	\$33.17	\$44.22	\$55.28	1900
2000	\$279.52	\$217.40	\$59.23	\$88.84	\$109.76	\$109.76	\$22.11	\$33.17	\$44.22	\$55.28	2000
2100	\$293.50	\$229.66	\$59.23	\$88.84	\$115.35	\$115.35	\$22.11	\$33.17	\$44.22	\$55.28	2100
2200	\$307.48	\$241.92	\$59.23	\$88.84	\$118.45	\$120.94	\$22.11	\$33.17	\$44.22	\$55.28	2200
2300	\$321.46	\$254.18	\$59.23	\$88.84	\$118.45	\$126.54	\$22.11	\$33.17	\$44.22	\$55.28	2300
2400	\$335.44	\$266.44	\$59.23	\$88.84	\$118.45	\$132.13	\$22.11	\$33.17	\$44.22	\$55.28	2400
2500	\$349.42	\$278.70	\$59.23	\$88.84	\$118.45	\$137.72	\$22.11	\$33.17	\$44.22	\$55.28	2500

Key	
	Minimum Bill Limit
	Maximum Bill Limit

Winter, Residential Electric Heat Service (Based on Rate R-H)

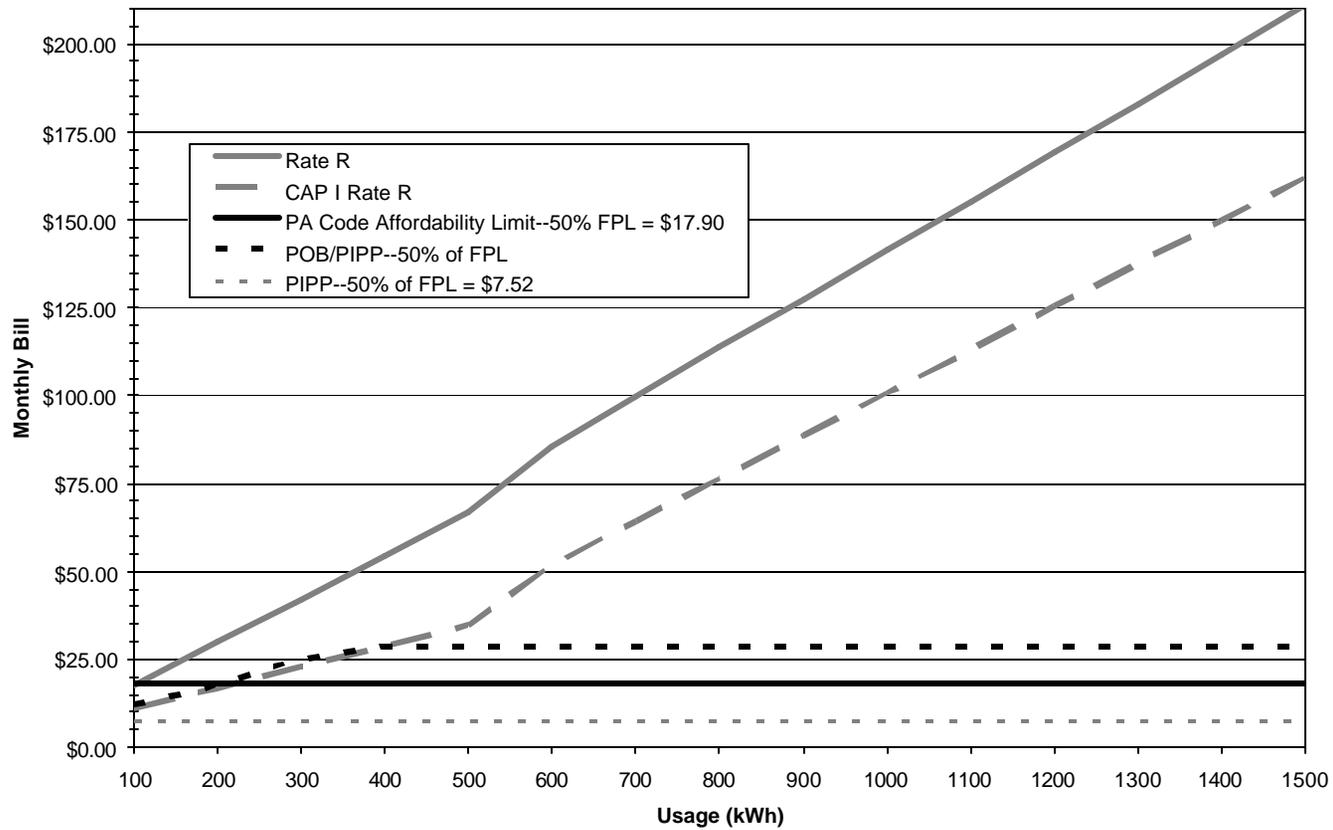
Family Size =6

Usage/Mo (KWh)	Rate R-H	CAP Rate	POB/PIPP				PIPP				Usage/Mo (KWh)
			20%	30%	40%	50%	20%	30%	40%	50%	
100	\$17.38	\$11.04	\$30.00	\$30.00	\$30.00	\$30.00	\$22.11	\$33.17	\$44.22	\$55.28	100
200	\$29.64	\$16.96	\$30.00	\$30.00	\$30.00	\$30.00	\$22.11	\$33.17	\$44.22	\$55.28	200
300	\$41.90	\$22.88	\$30.00	\$30.00	\$30.00	\$30.00	\$22.11	\$33.17	\$44.22	\$55.28	300
400	\$54.16	\$28.80	\$30.00	\$30.00	\$30.00	\$30.00	\$22.11	\$33.17	\$44.22	\$55.28	400
500	\$66.42	\$34.72	\$30.00	\$30.00	\$30.00	\$30.00	\$22.11	\$33.17	\$44.22	\$55.28	500
600	\$78.68	\$40.64	\$31.47	\$31.47	\$31.47	\$31.47	\$22.11	\$33.17	\$44.22	\$55.28	600
700	\$89.85	\$51.68	\$33.89	\$33.89	\$33.89	\$33.89	\$22.11	\$33.17	\$44.22	\$55.28	700
800	\$95.90	\$57.60	\$36.31	\$36.31	\$36.31	\$36.31	\$22.11	\$33.17	\$44.22	\$55.28	800
900	\$101.95	\$63.52	\$38.73	\$38.73	\$38.73	\$38.73	\$22.11	\$33.17	\$44.22	\$55.28	900
1000	\$108.00	\$69.44	\$41.15	\$41.15	\$41.15	\$41.15	\$22.11	\$33.17	\$44.22	\$55.28	1000
1100	\$114.05	\$75.36	\$43.57	\$43.57	\$43.57	\$43.57	\$22.11	\$33.17	\$44.22	\$55.28	1100
1200	\$120.10	\$81.28	\$45.99	\$45.99	\$45.99	\$45.99	\$22.11	\$33.17	\$44.22	\$55.28	1200
1300	\$126.15	\$87.20	\$48.41	\$48.41	\$48.41	\$48.41	\$22.11	\$33.17	\$44.22	\$55.28	1300
1400	\$132.20	\$93.12	\$50.83	\$50.83	\$50.83	\$50.83	\$22.11	\$33.17	\$44.22	\$55.28	1400
1500	\$138.25	\$99.04	\$53.25	\$53.25	\$53.25	\$53.25	\$22.11	\$33.17	\$44.22	\$55.28	1500
1600	\$144.30	\$104.96	\$55.67	\$55.67	\$55.67	\$55.67	\$22.11	\$33.17	\$44.22	\$55.28	1600
1700	\$150.35	\$110.88	\$58.09	\$58.09	\$58.09	\$58.09	\$22.11	\$33.17	\$44.22	\$55.28	1700
1800	\$156.40	\$116.80	\$59.23	\$60.51	\$60.51	\$60.51	\$22.11	\$33.17	\$44.22	\$55.28	1800
1900	\$162.45	\$122.72	\$59.23	\$62.93	\$62.93	\$62.93	\$22.11	\$33.17	\$44.22	\$55.28	1900
2000	\$168.50	\$128.64	\$59.23	\$65.35	\$65.35	\$65.35	\$22.11	\$33.17	\$44.22	\$55.28	2000
2100	\$174.55	\$134.56	\$59.23	\$67.77	\$67.77	\$67.77	\$22.11	\$33.17	\$44.22	\$55.28	2100
2200	\$180.60	\$140.48	\$59.23	\$70.19	\$70.19	\$70.19	\$22.11	\$33.17	\$44.22	\$55.28	2200
2300	\$186.65	\$146.40	\$59.23	\$72.61	\$72.61	\$72.61	\$22.11	\$33.17	\$44.22	\$55.28	2300
2400	\$192.70	\$152.32	\$59.23	\$75.03	\$75.03	\$75.03	\$22.11	\$33.17	\$44.22	\$55.28	2400
2500	\$198.75	\$158.24	\$59.23	\$77.45	\$77.45	\$77.45	\$22.11	\$33.17	\$44.22	\$55.28	2500

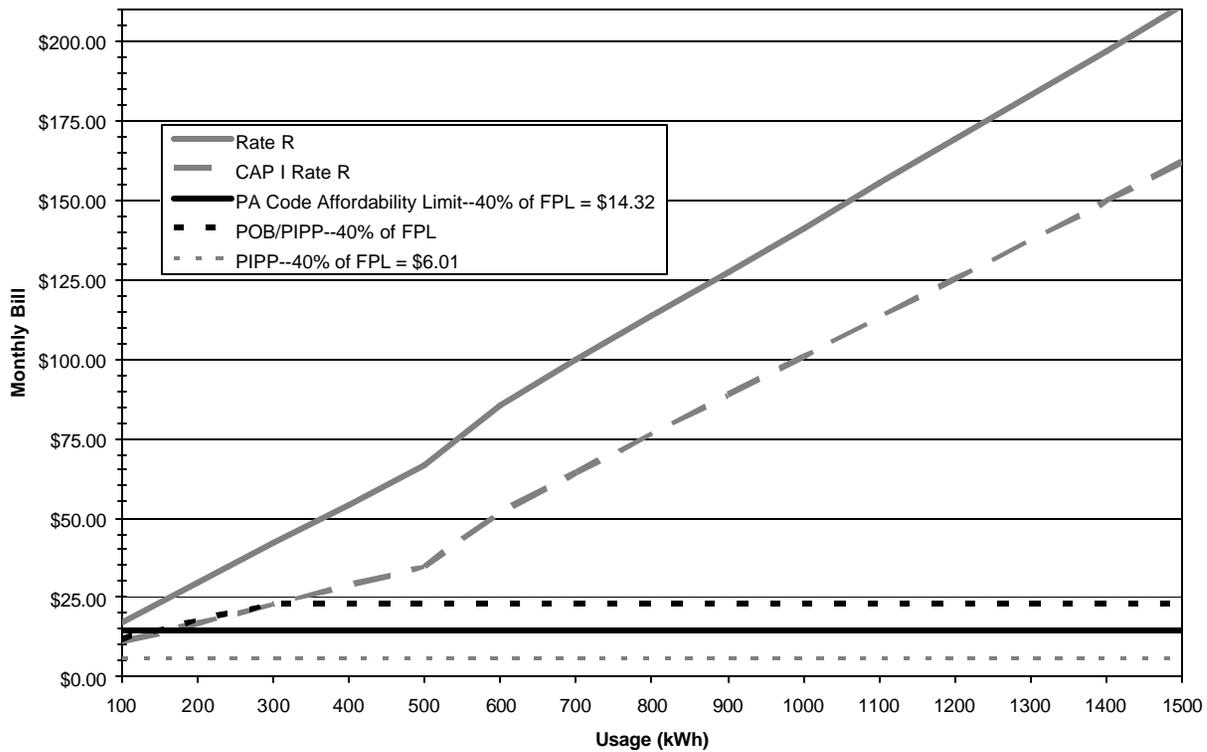
Key	
	Minimum Bill Limit
	Maximum Bill Limit

XIX. RATE COMPARISON GRAPHS

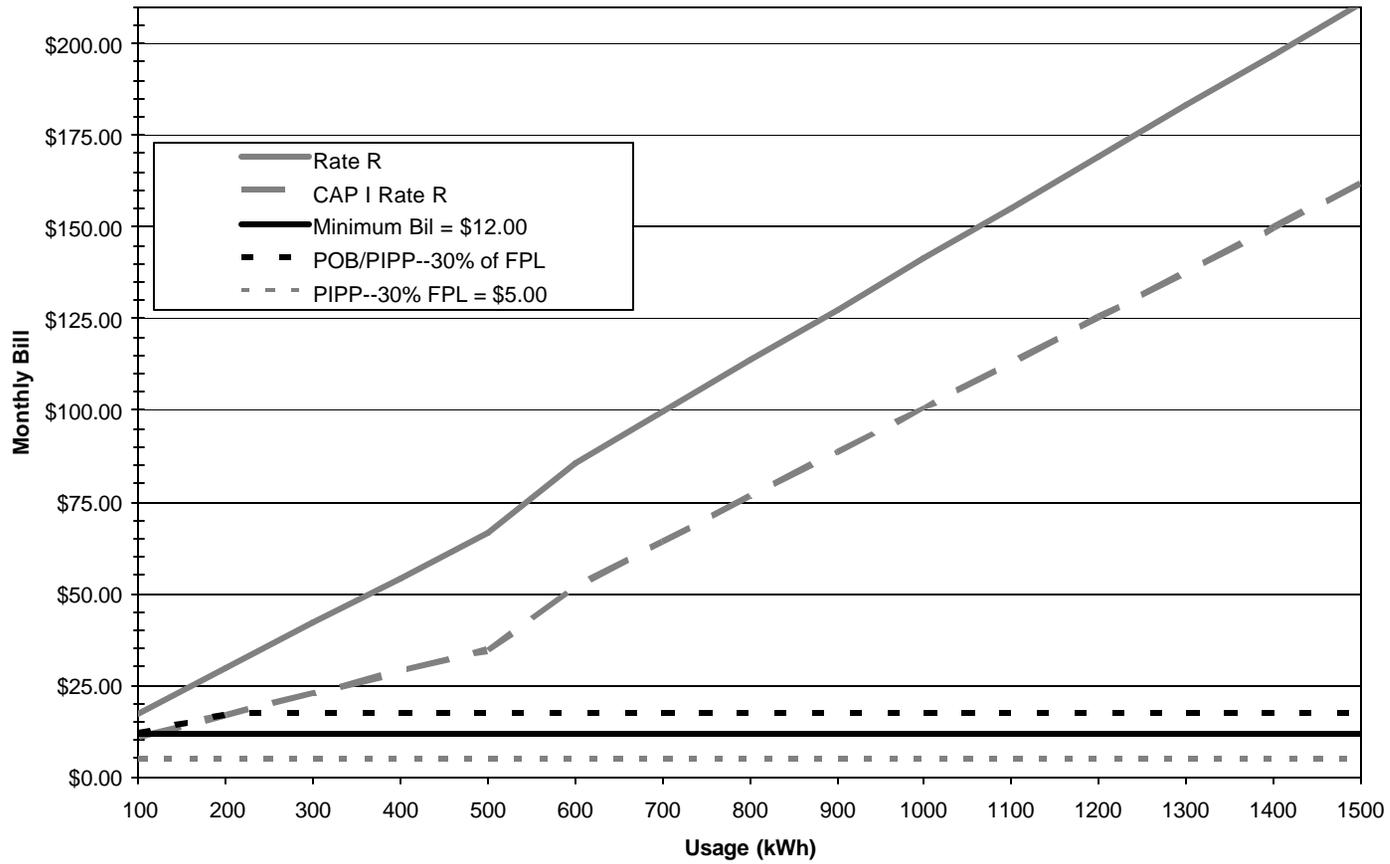
Family Size of One--Summer Rate R Comparison Chart 50% of Federal Poverty Level



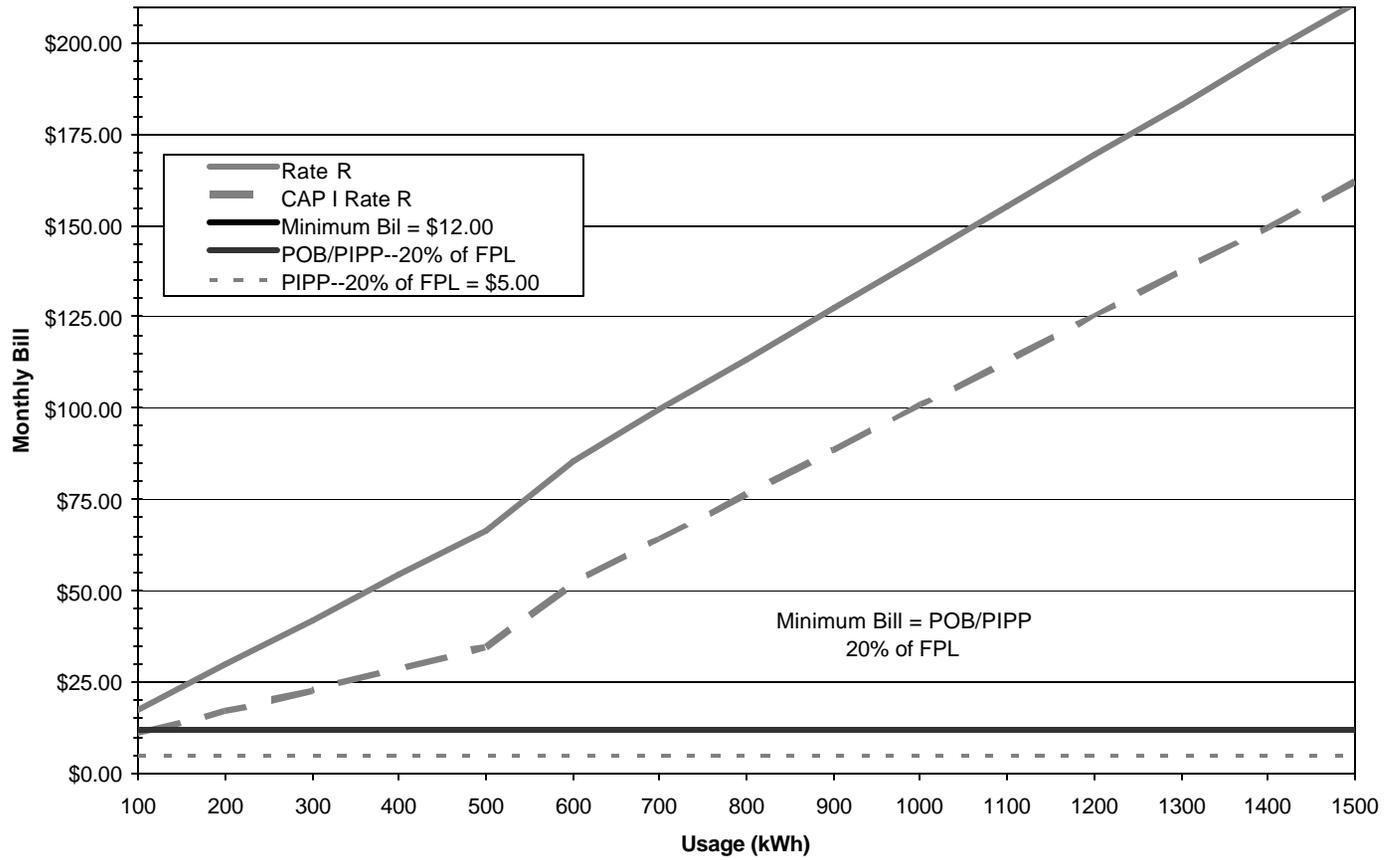
**Family Size of One--Summer Rate R Comparison Chart
40% of Federal Poverty Level**



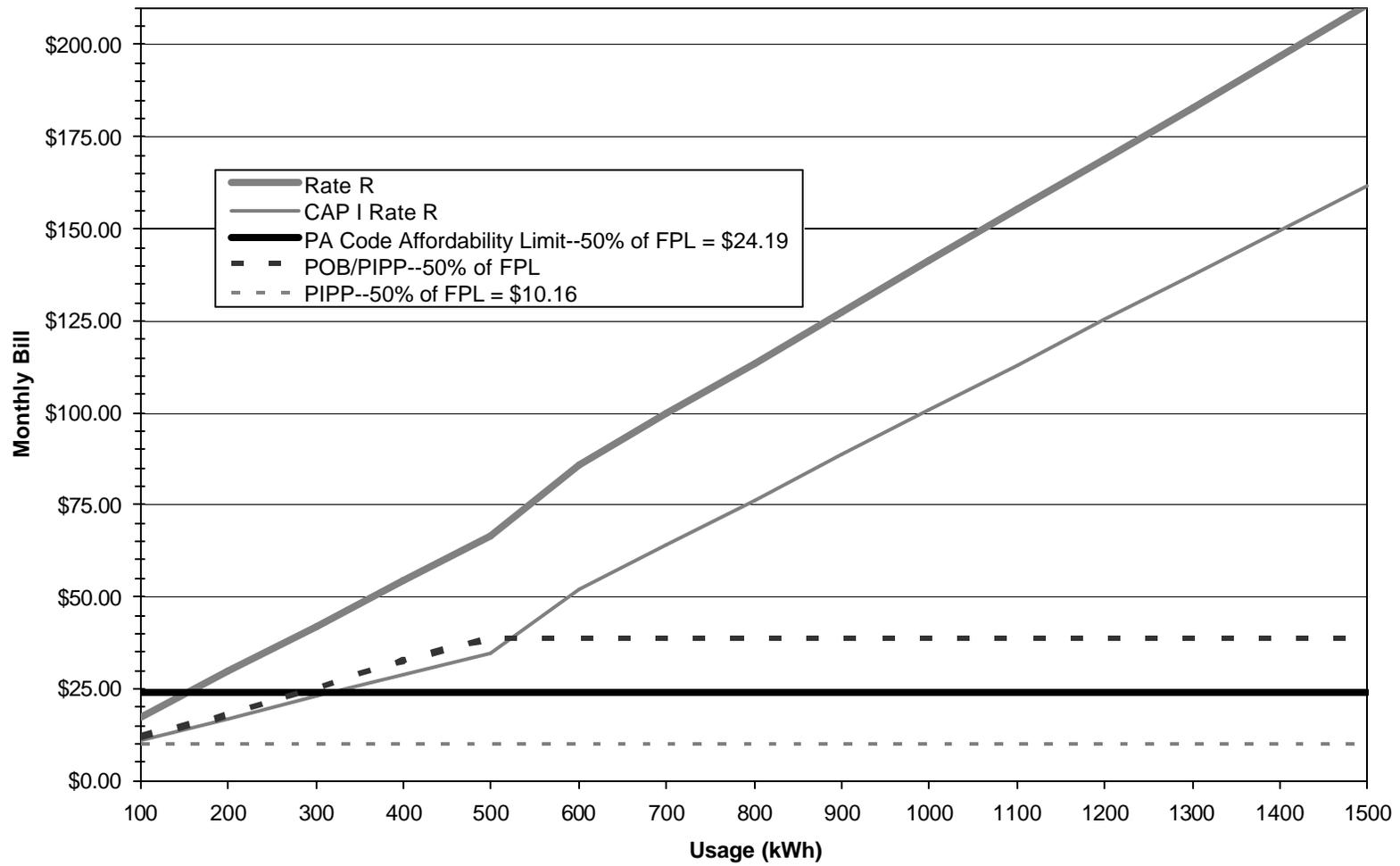
**Family Size of One--Summer Rate R Comparison Chart
30% of Federal Poverty Level**



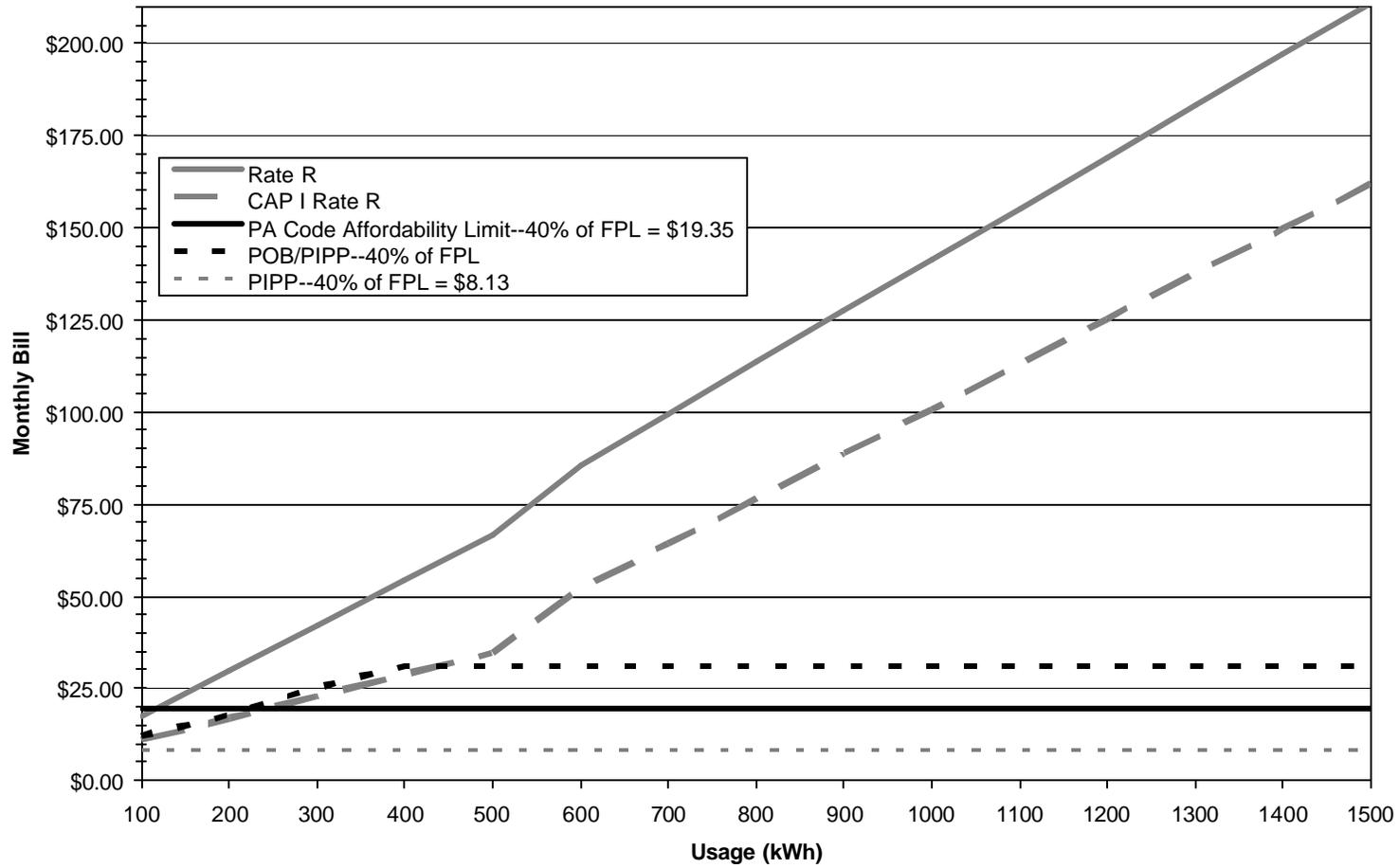
**Family Size of One--Summer Rate R Comparison Chart
20% of Federal Poverty Level**



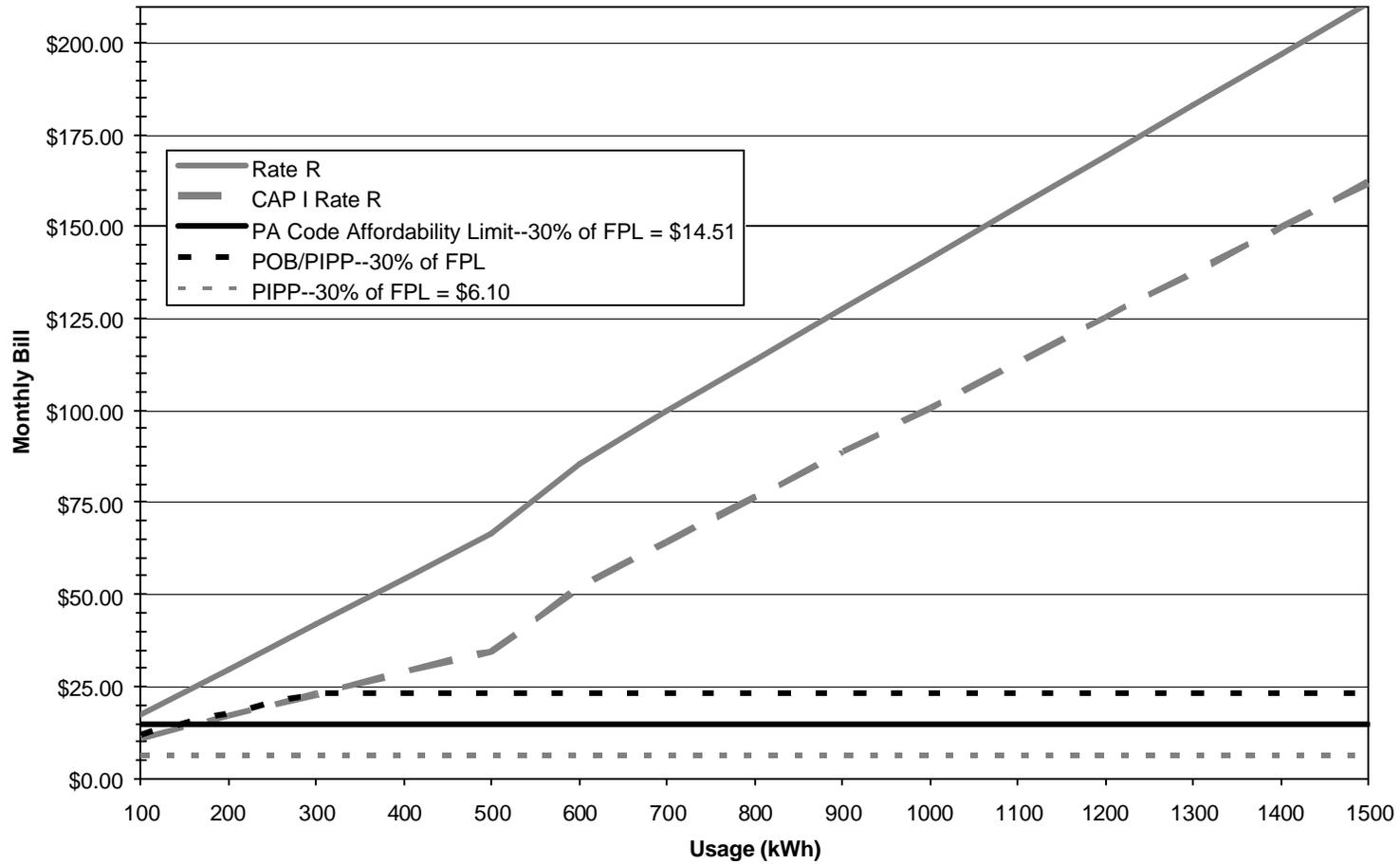
**Family Size of Two--Summer Rate R Comparison Chart
50% of Federal Poverty Level**



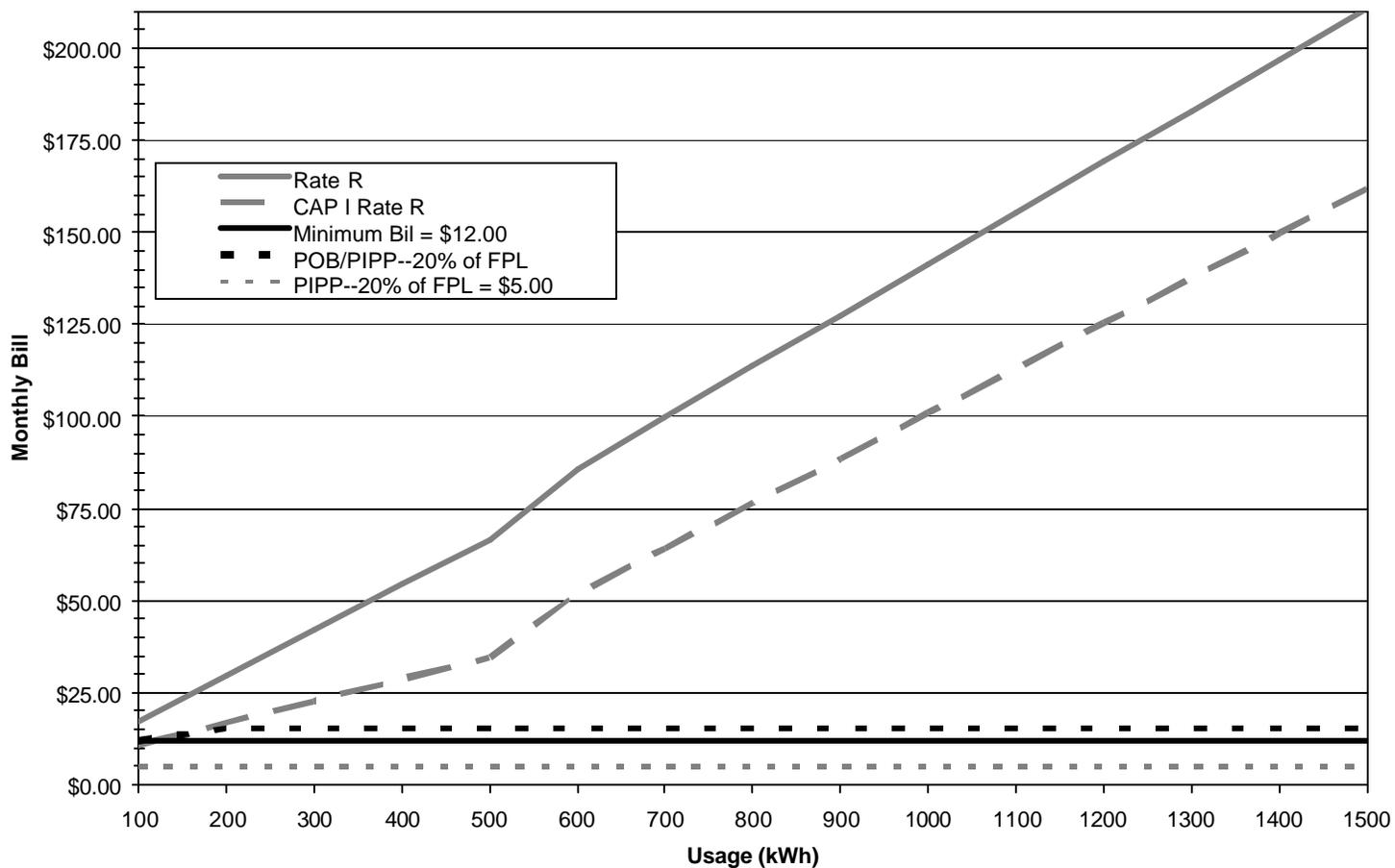
**Family Size of Two--Summer Rate R Comparison Chart
40% of Federal Poverty Level**



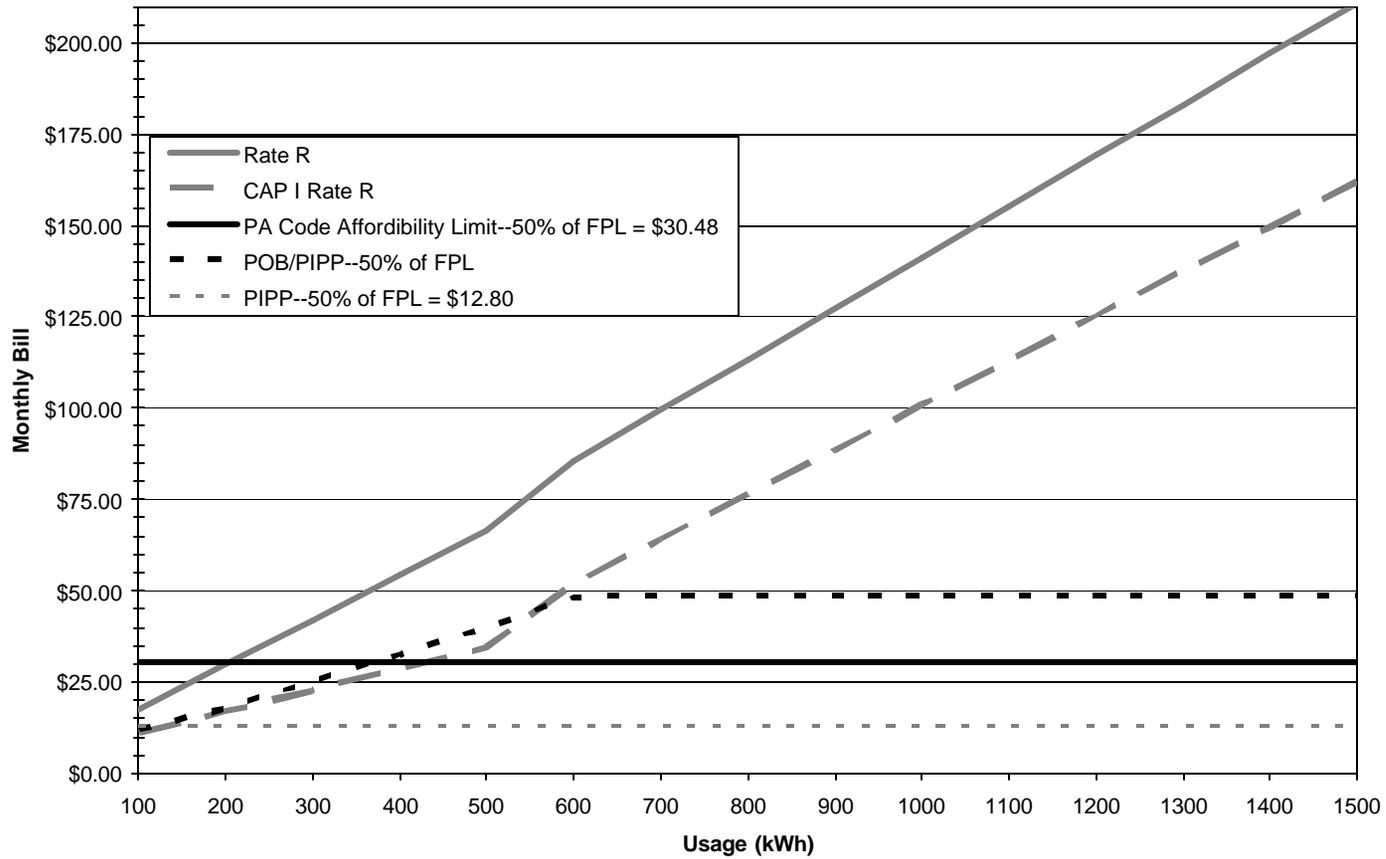
**Family Size of Two--Summer Rate R Comparison Chart
30% of Federal Poverty Level**



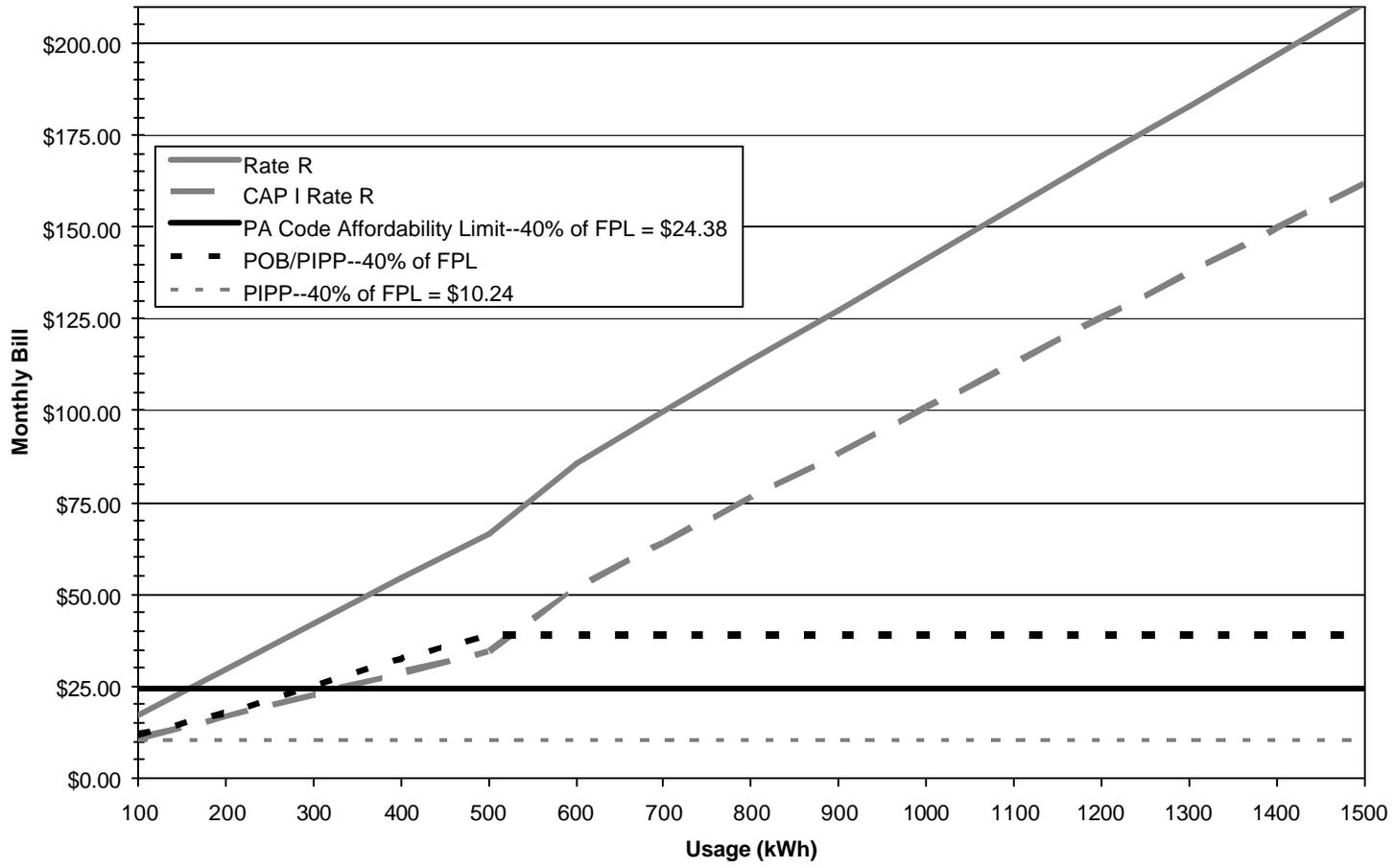
**Family Size of Two--Summer Rate R Comparison Chart
20% of Federal Poverty Level**



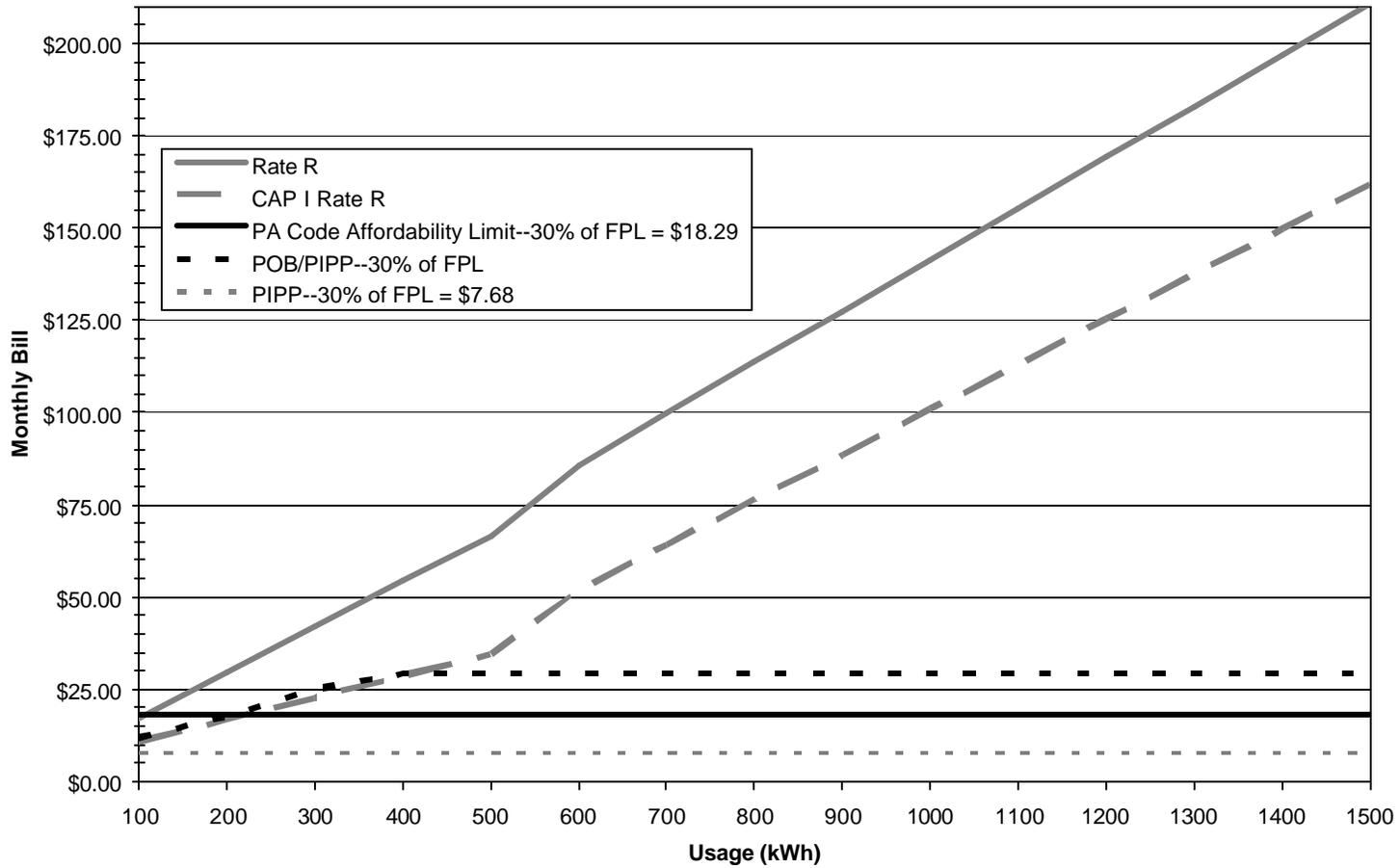
**Family Size of Three--Summer Rate R Comparison Chart
50% of Federal Poverty Level**



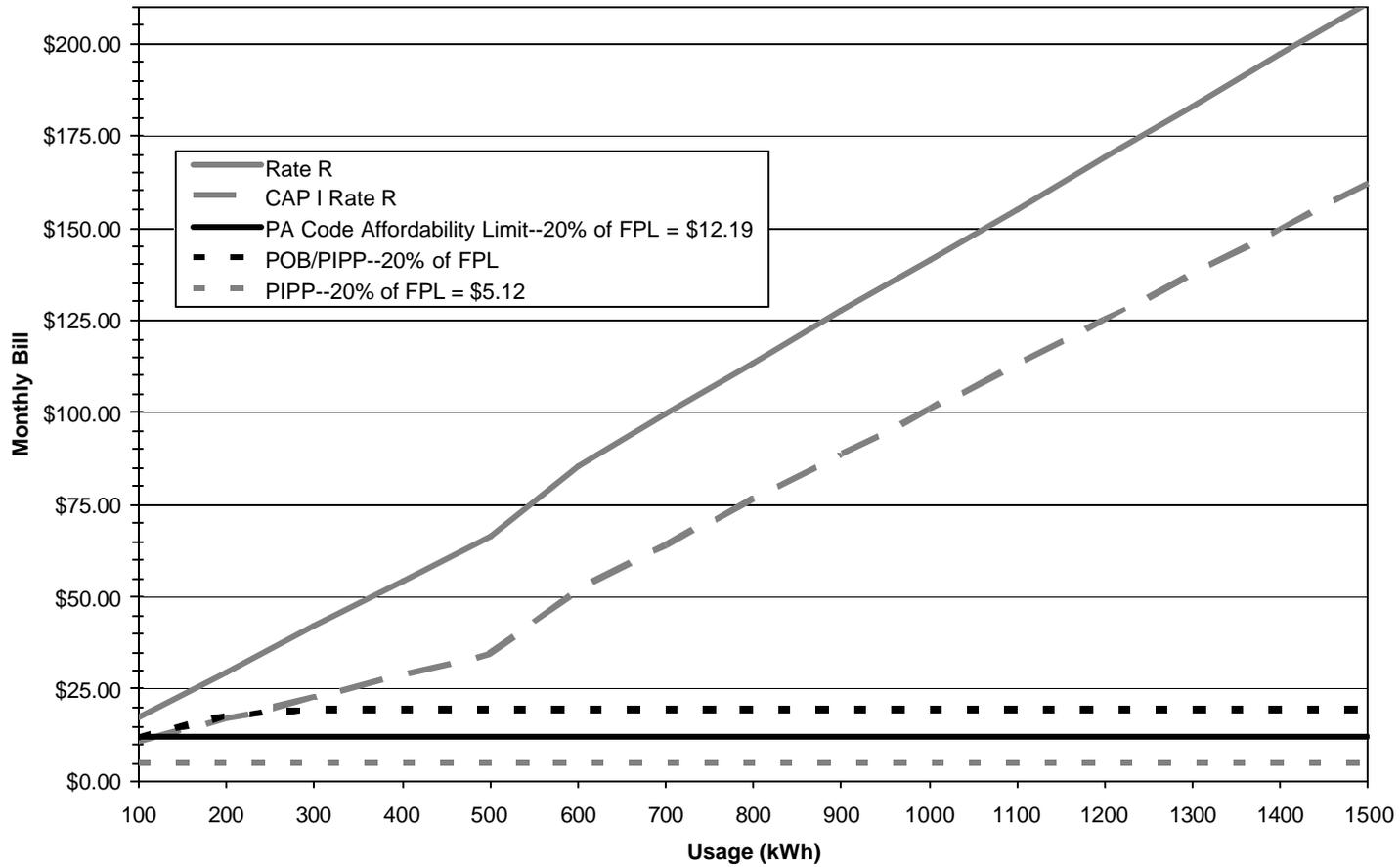
**Family Size of Three--Summer Rate R Comparison Chart
40% of Federal Poverty Level**



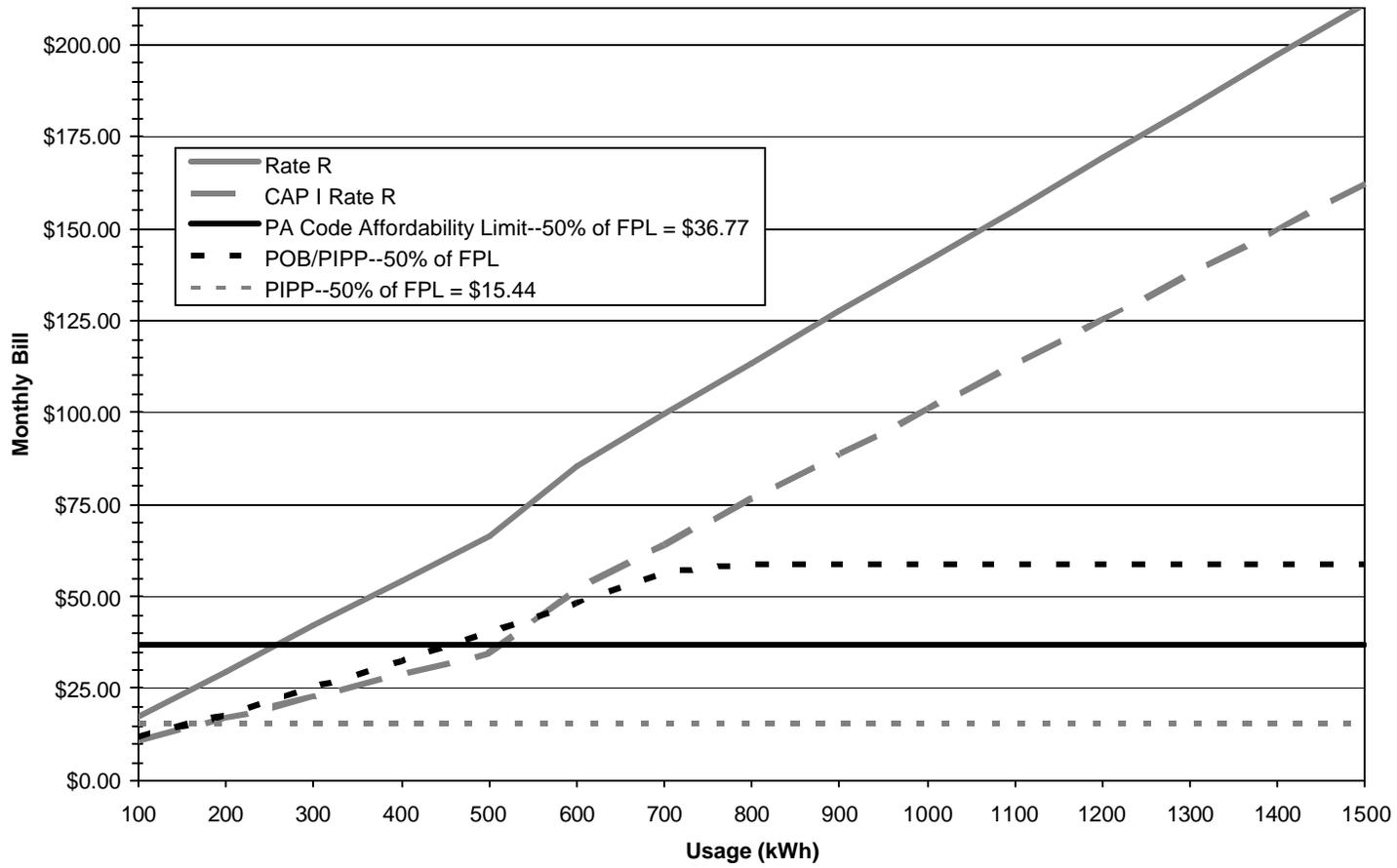
**Family Size of Three--Summer Rate R Comparison Chart
30% of Federal Poverty Level**



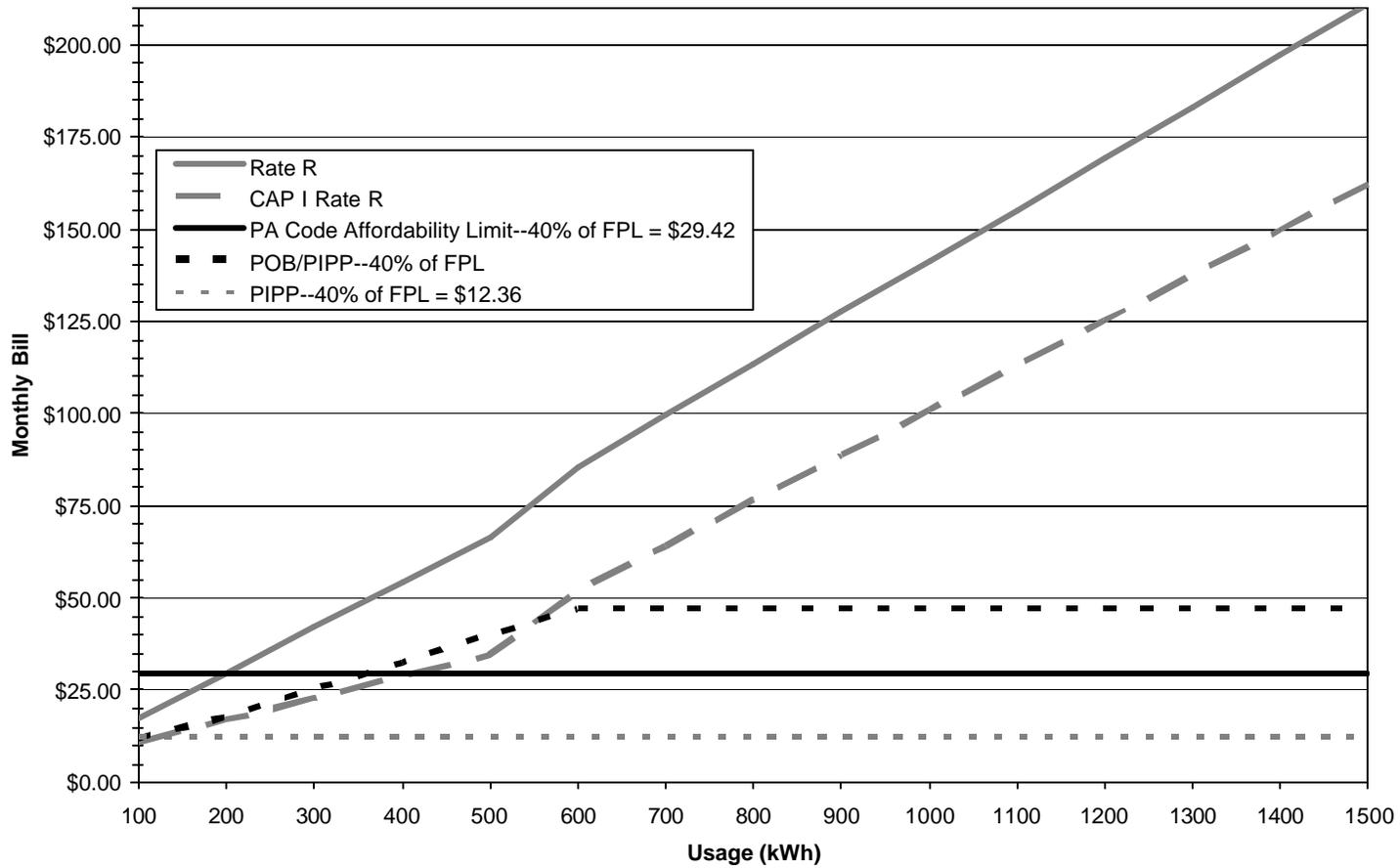
**Family Size of Three--Summer Rate R Comparison Chart
20% of Federal Poverty Level**



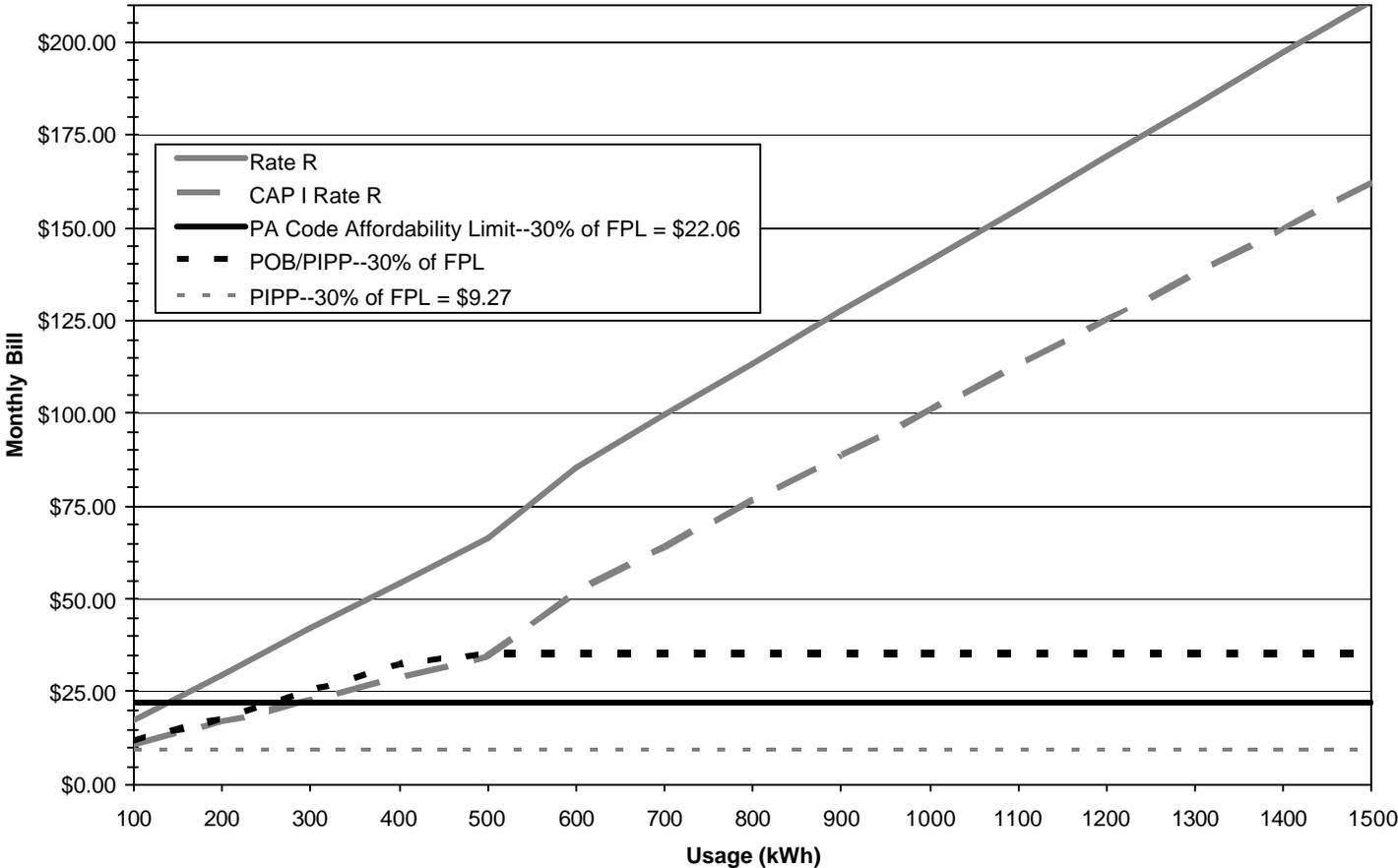
**Family Size of Four--Summer Rate R Comparison Chart
50% of Federal Poverty Level**



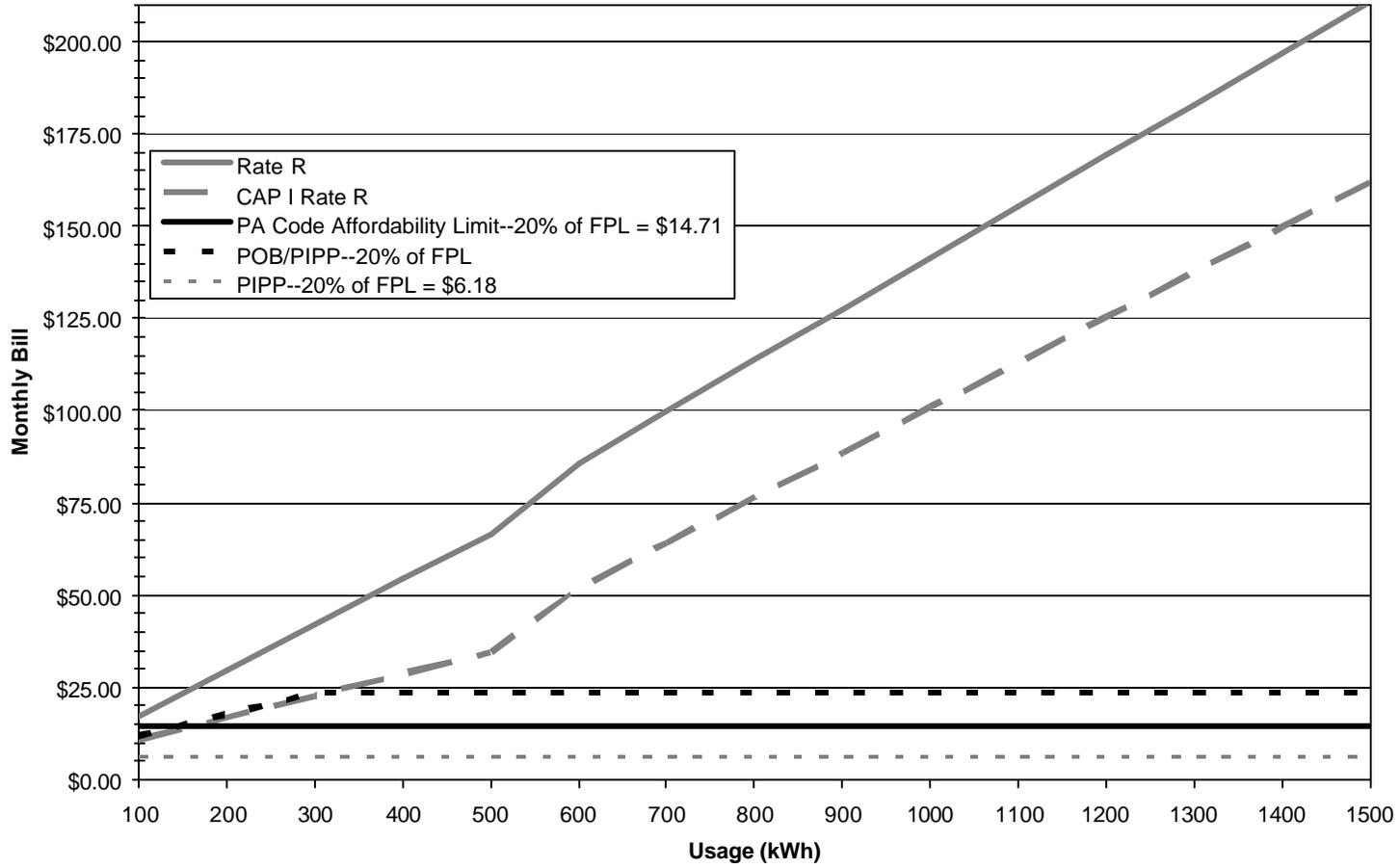
**Family Size of Four--Summer Rate R Comparison Chart
40% of Federal Poverty Level**



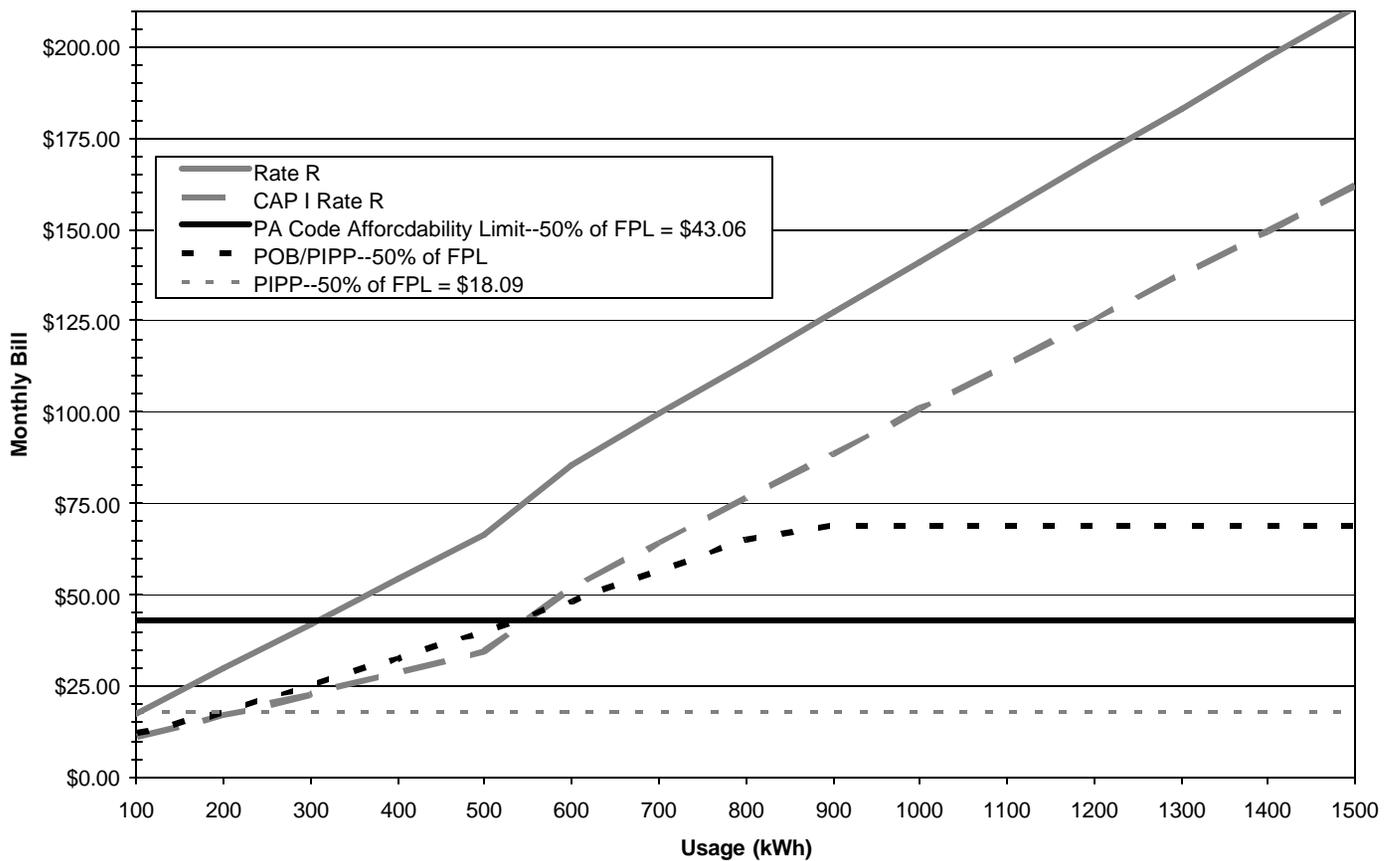
**Family Size of Four--Summer Rate R Comparison Chart
30% of Federal Poverty Level**



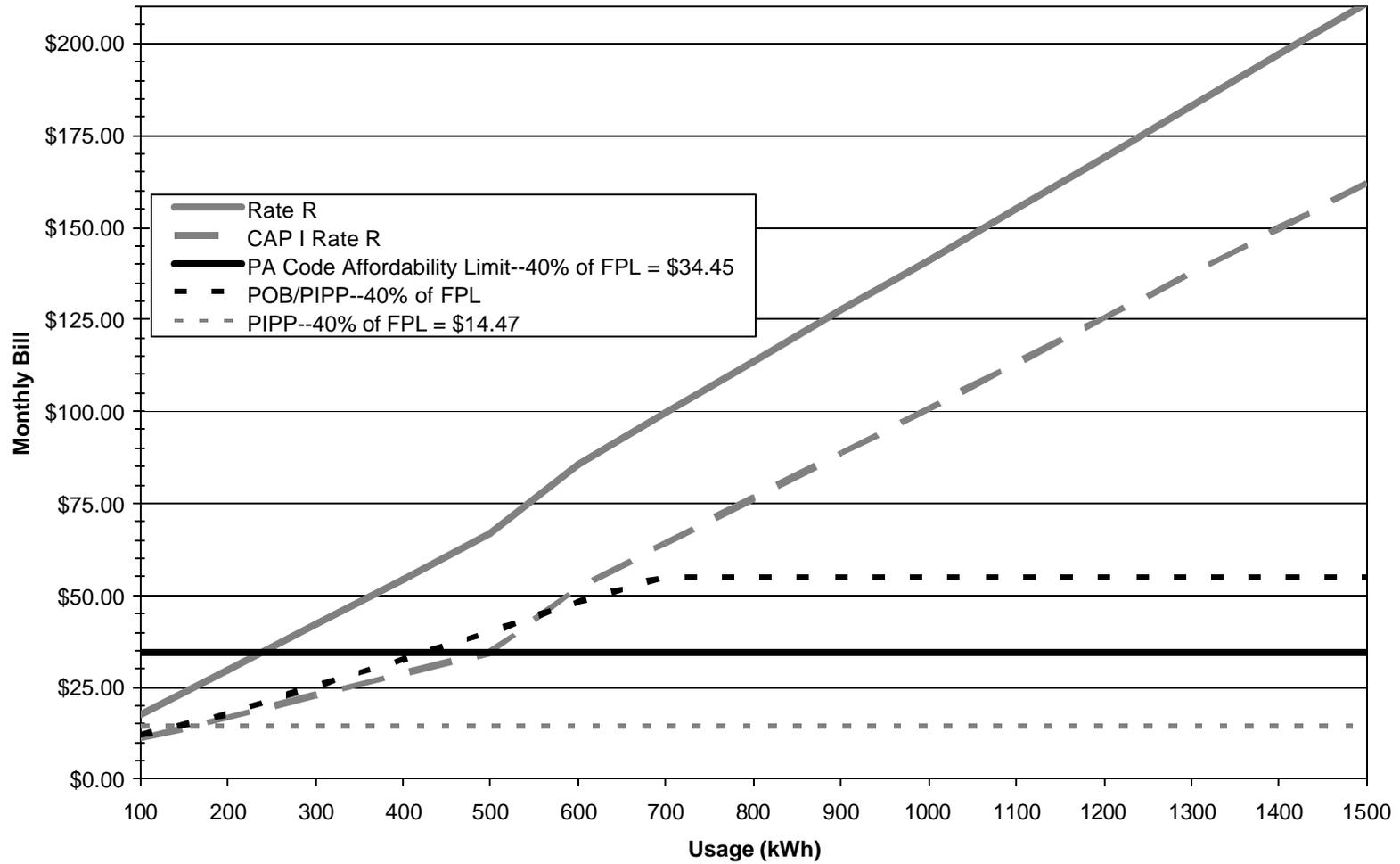
Family Size of Four--Summer Rate R Comparison Chart
20% of Federal Poverty Level



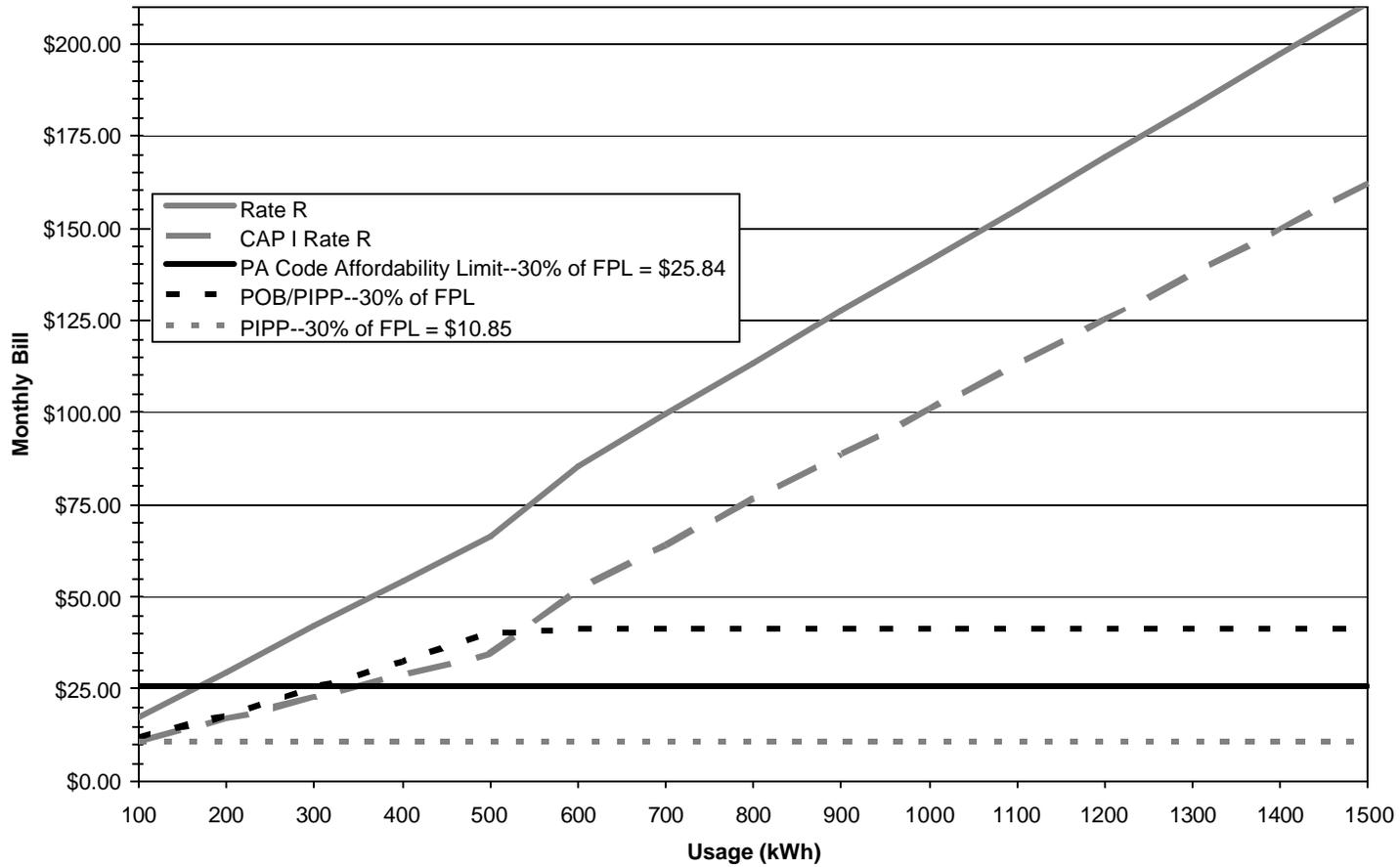
**Family Size of Five--Summer Rate R Comparison Chart
50% of Federal Poverty Level**



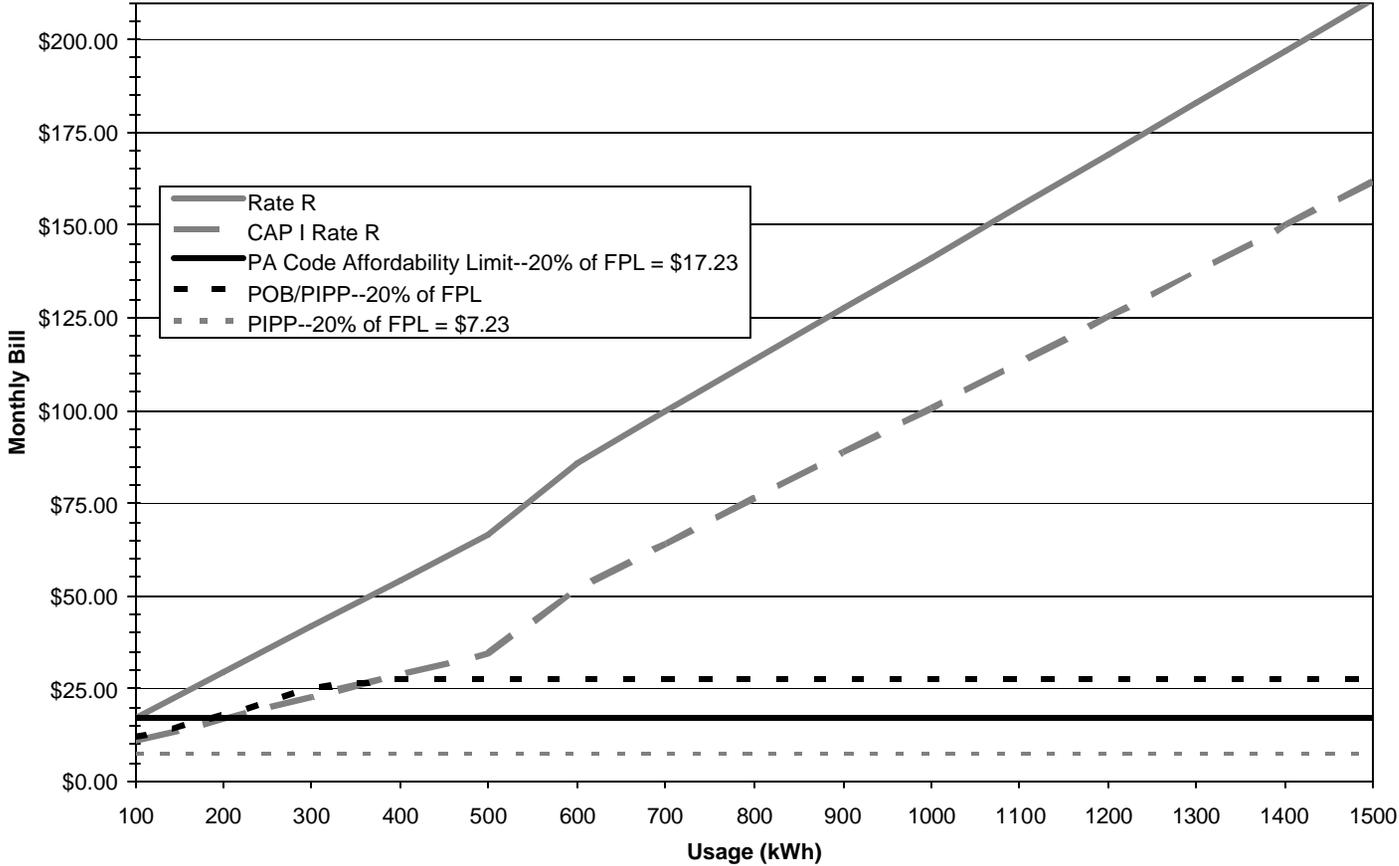
**Family Size of Five--Summer Rate R Comparison Chart
40% of Federal Poverty Level**



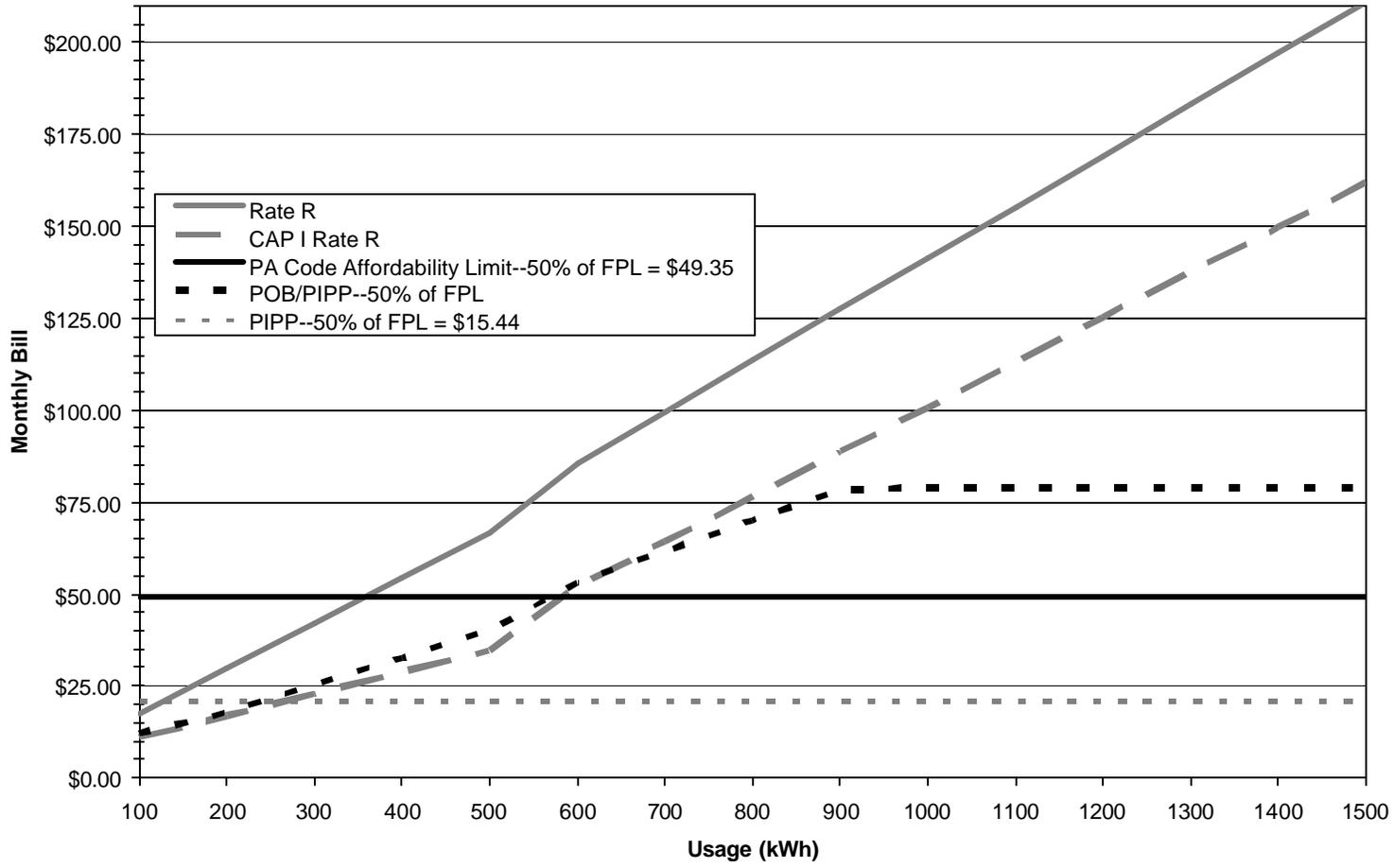
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30% of Federal Poverty Level**



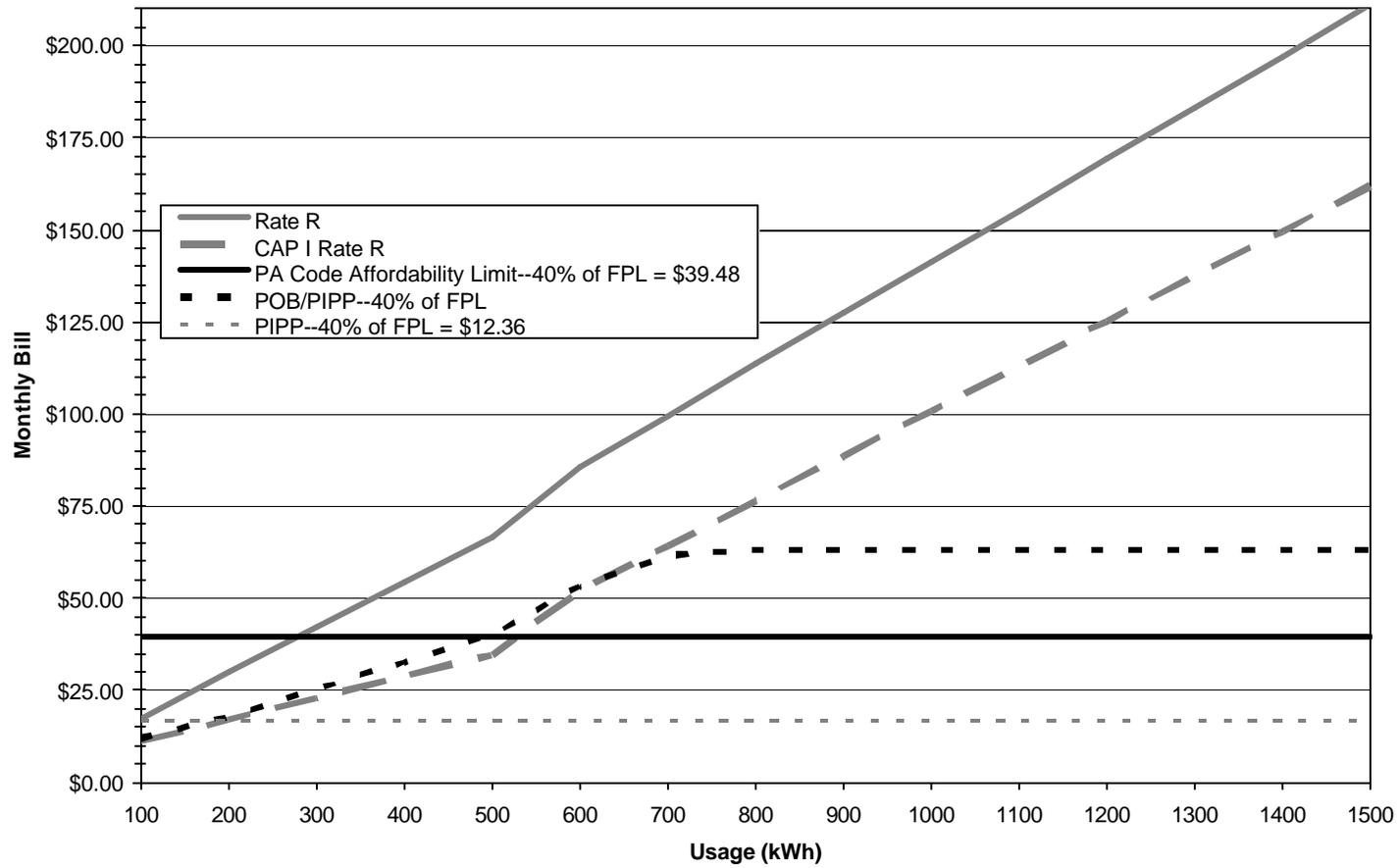
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20% of Federal Poverty Level**



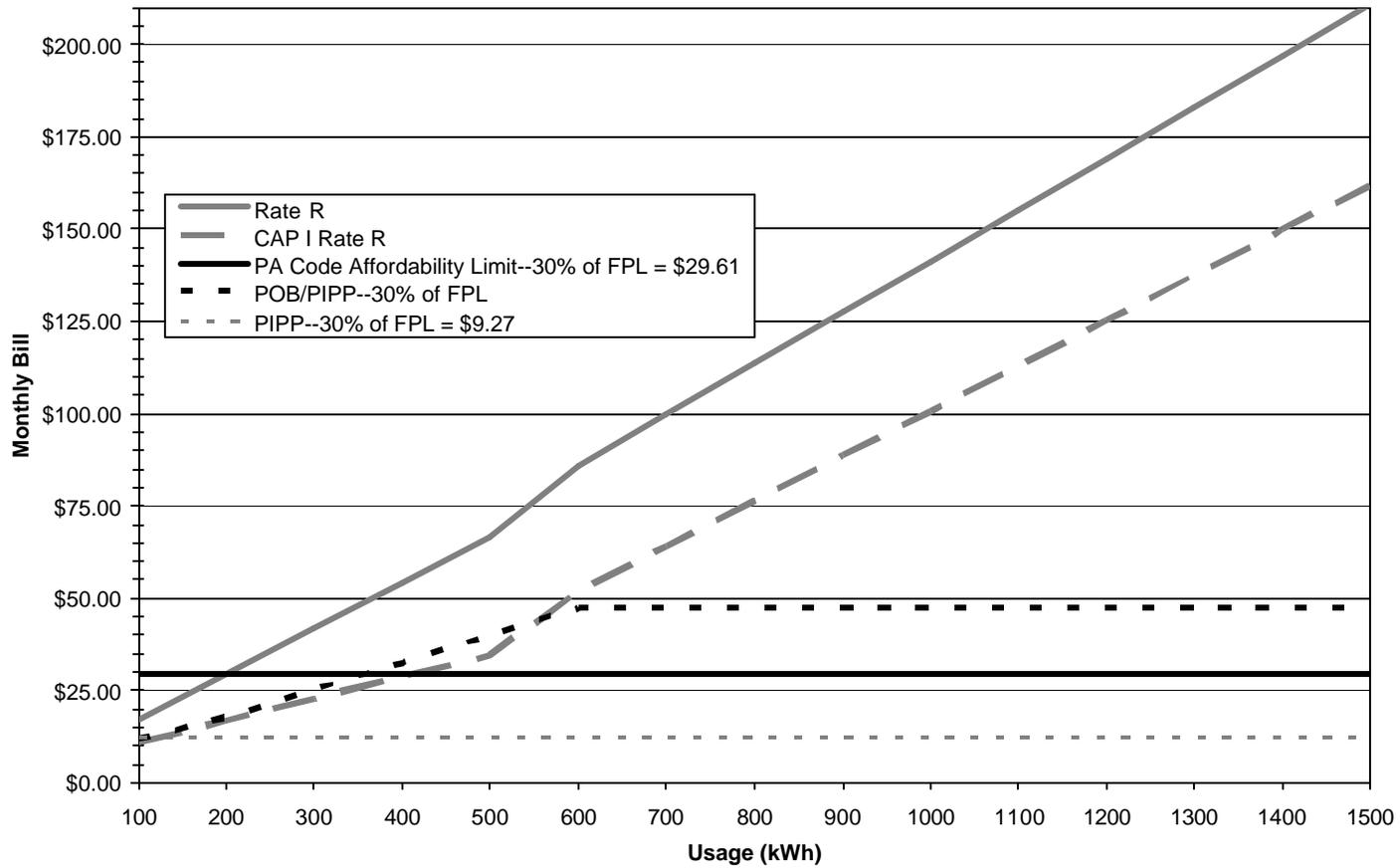
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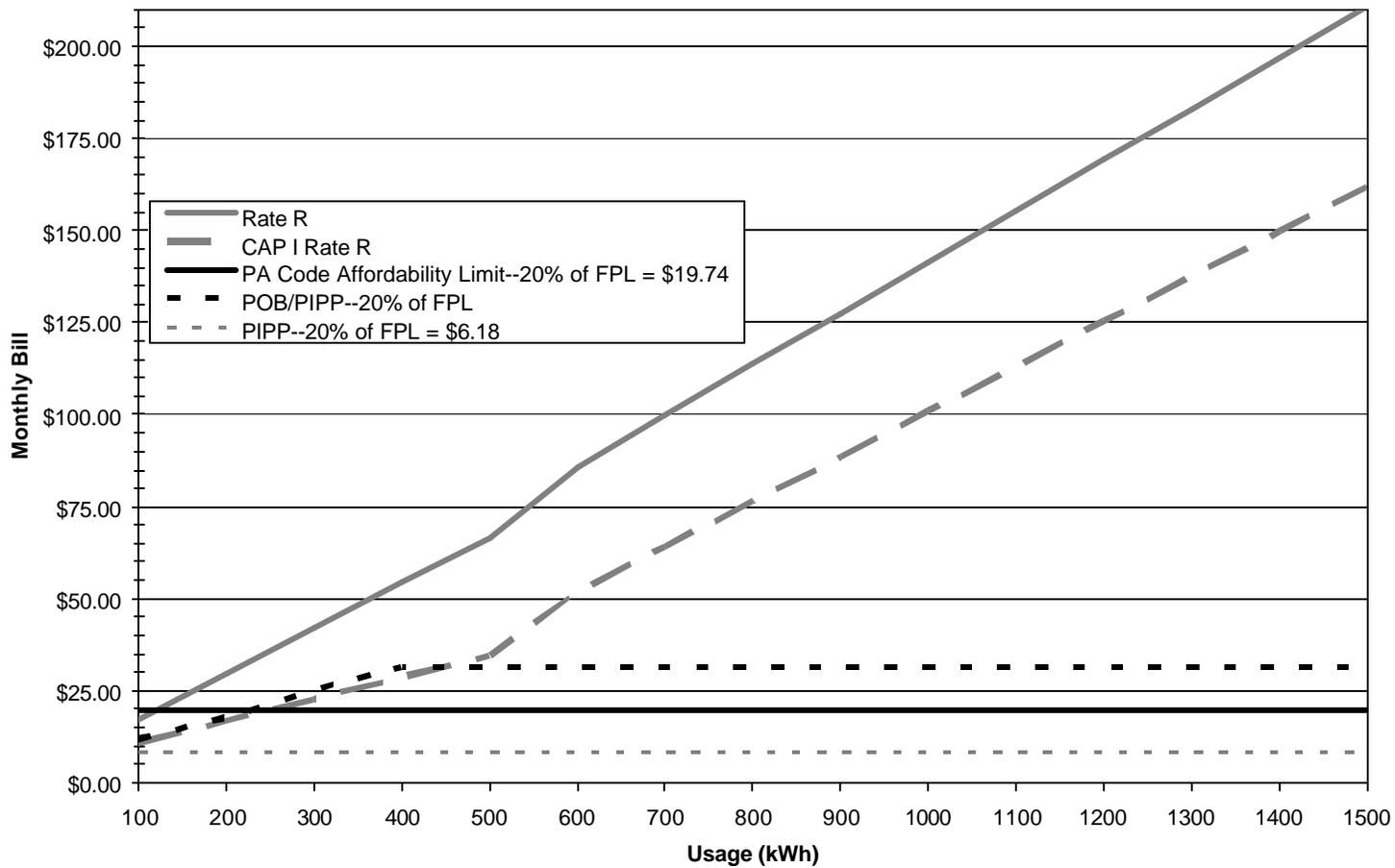
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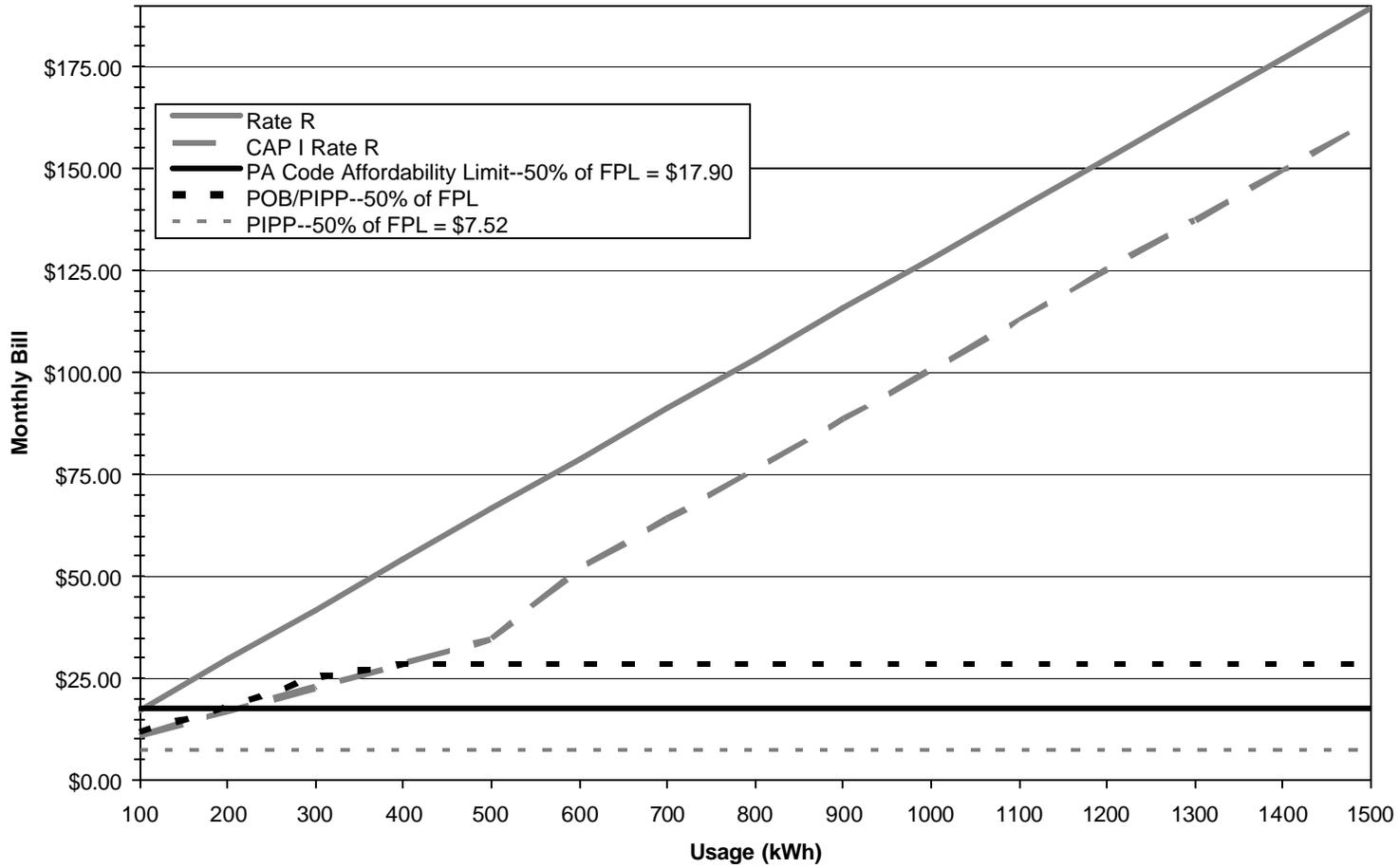
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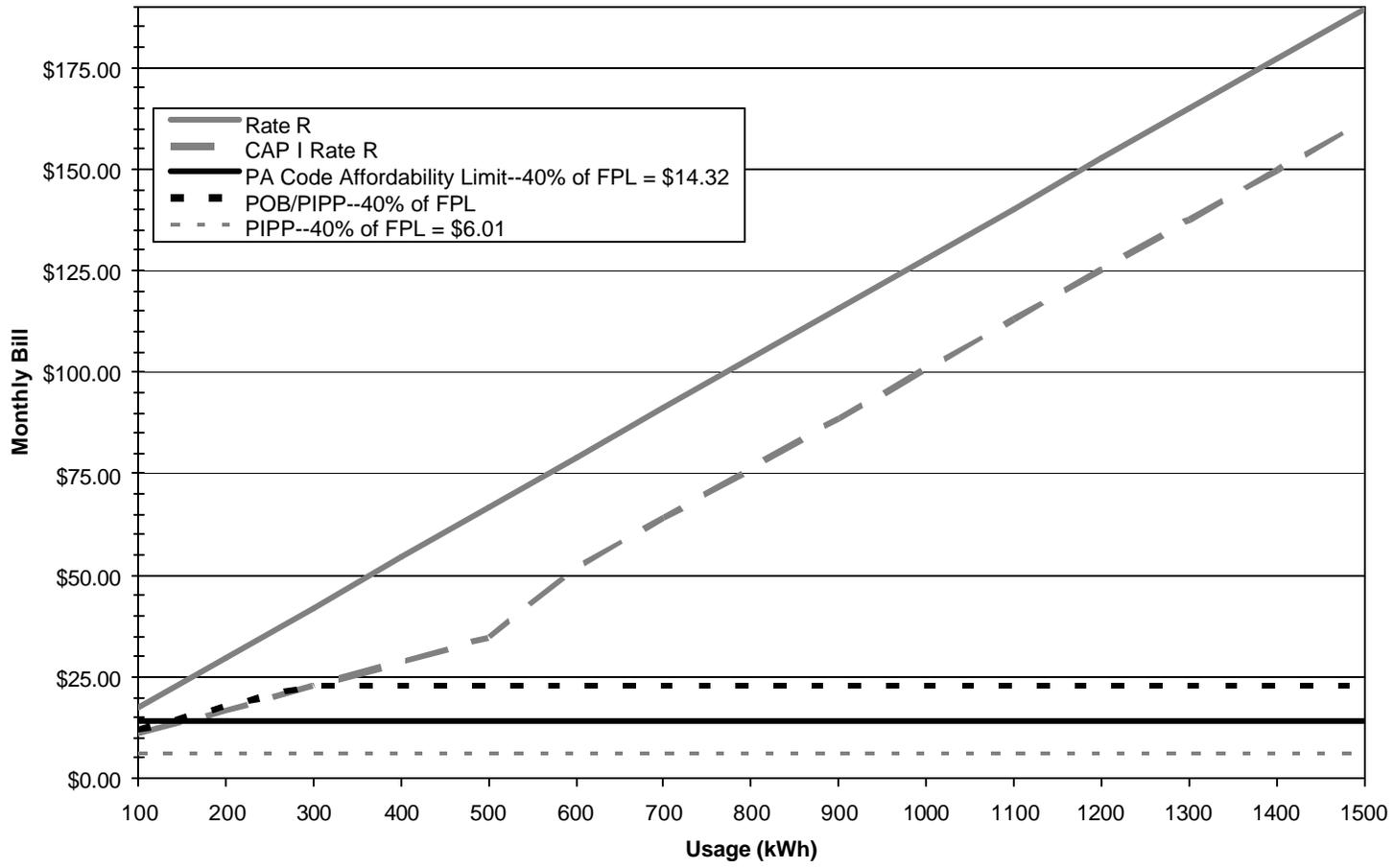
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20% of Federal Poverty Level**



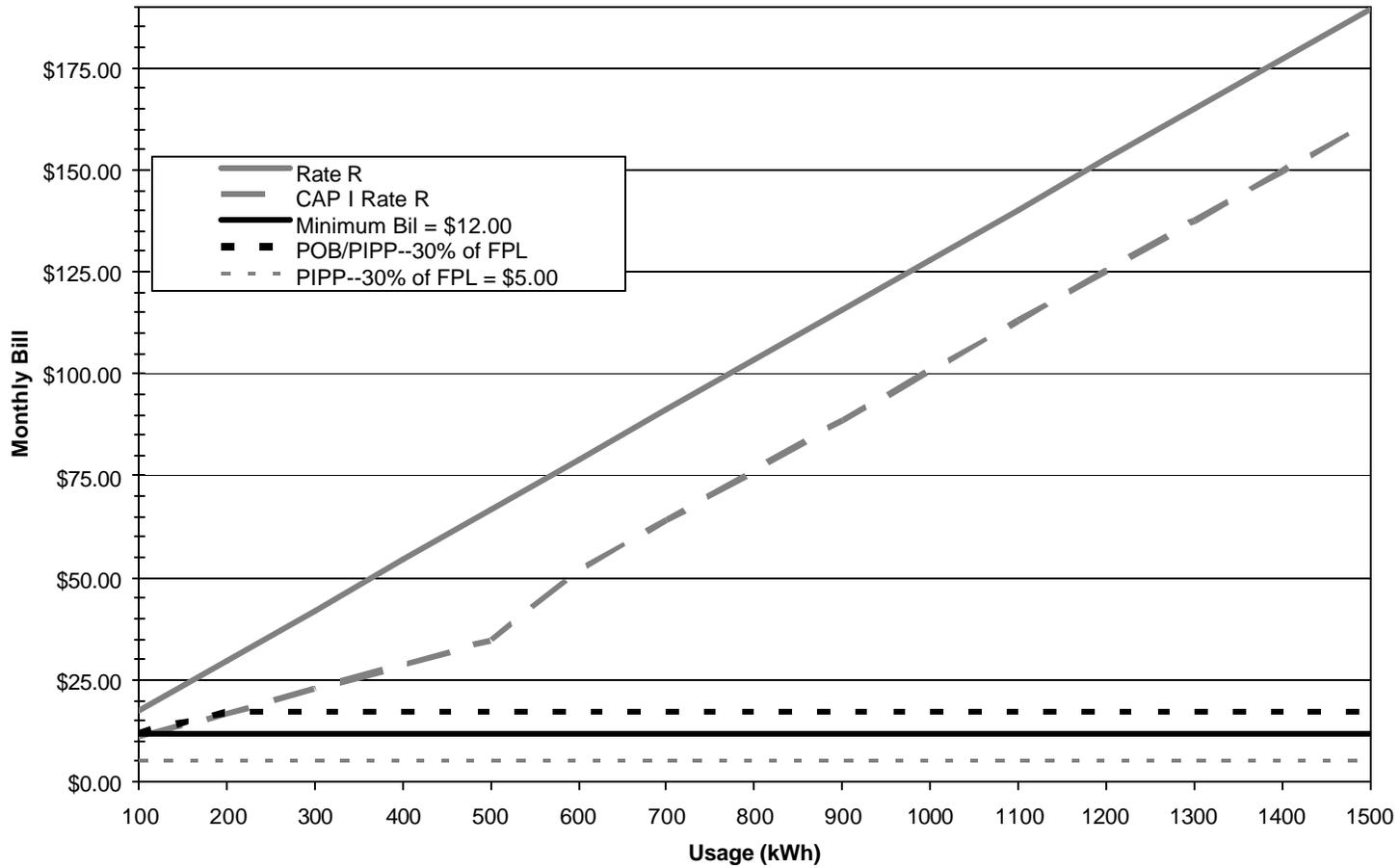
**Family Size of One--Winter Rate R Comparison Chart
50% of Federal Poverty Level**



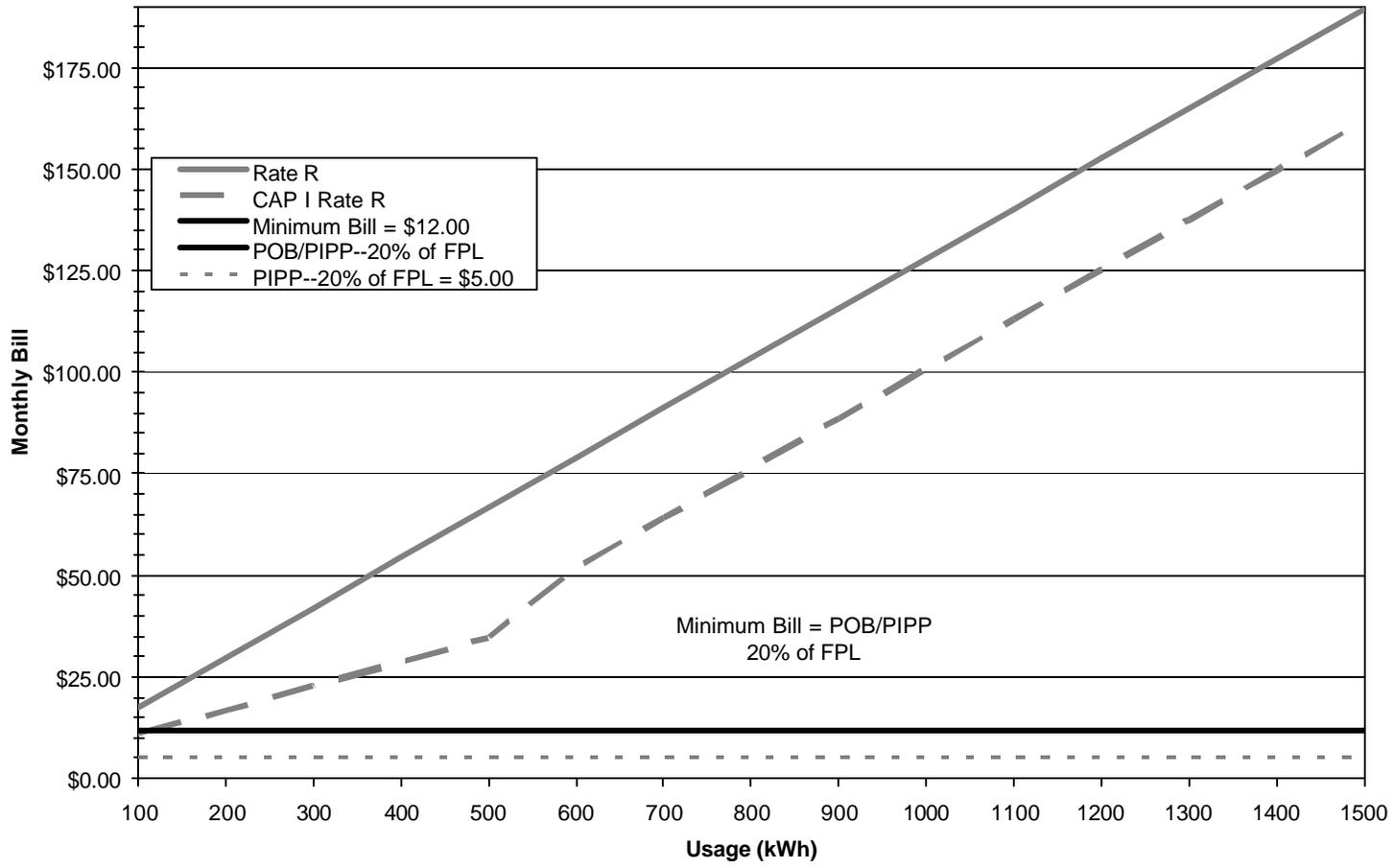
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40% of Federal Poverty Level**



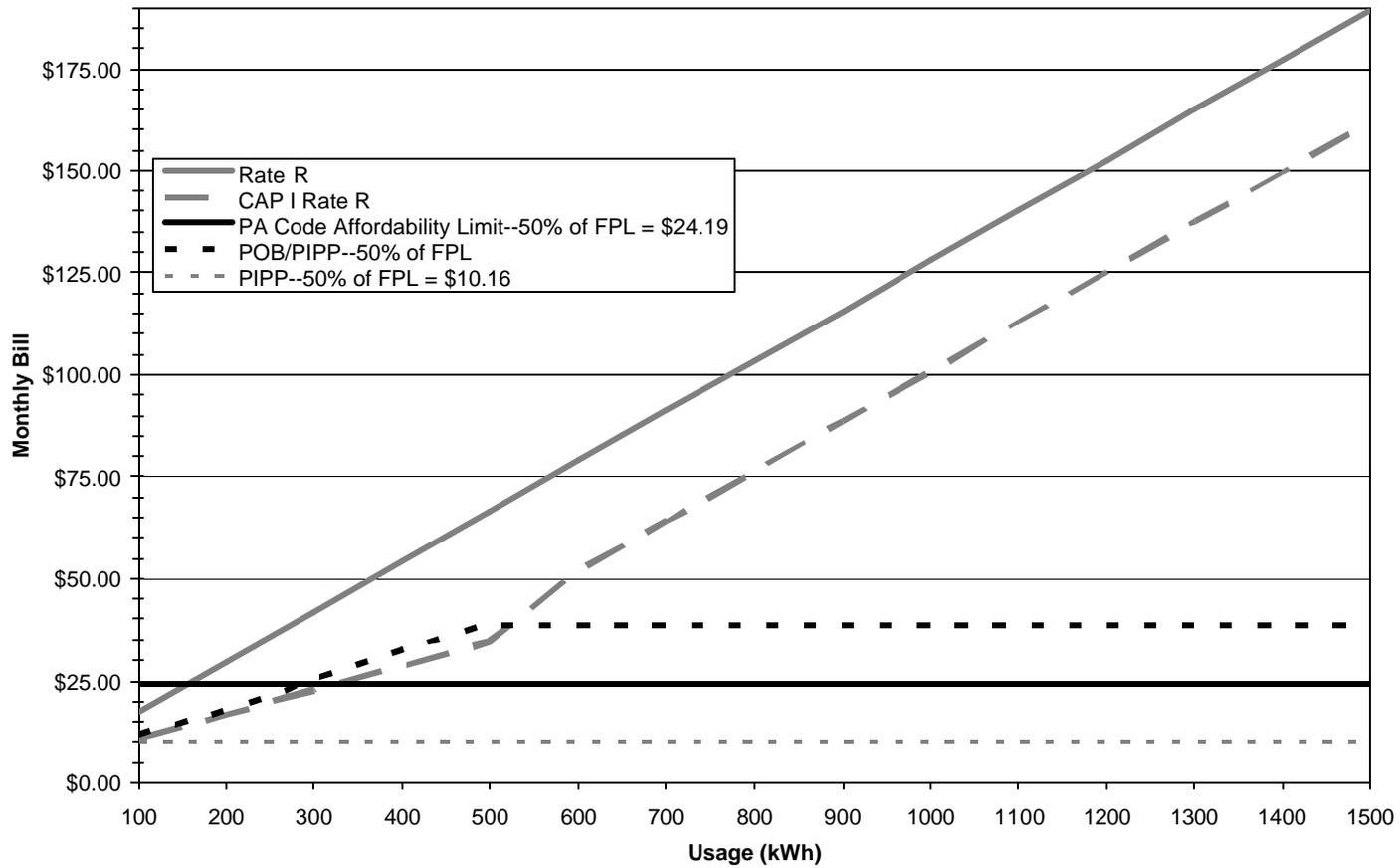
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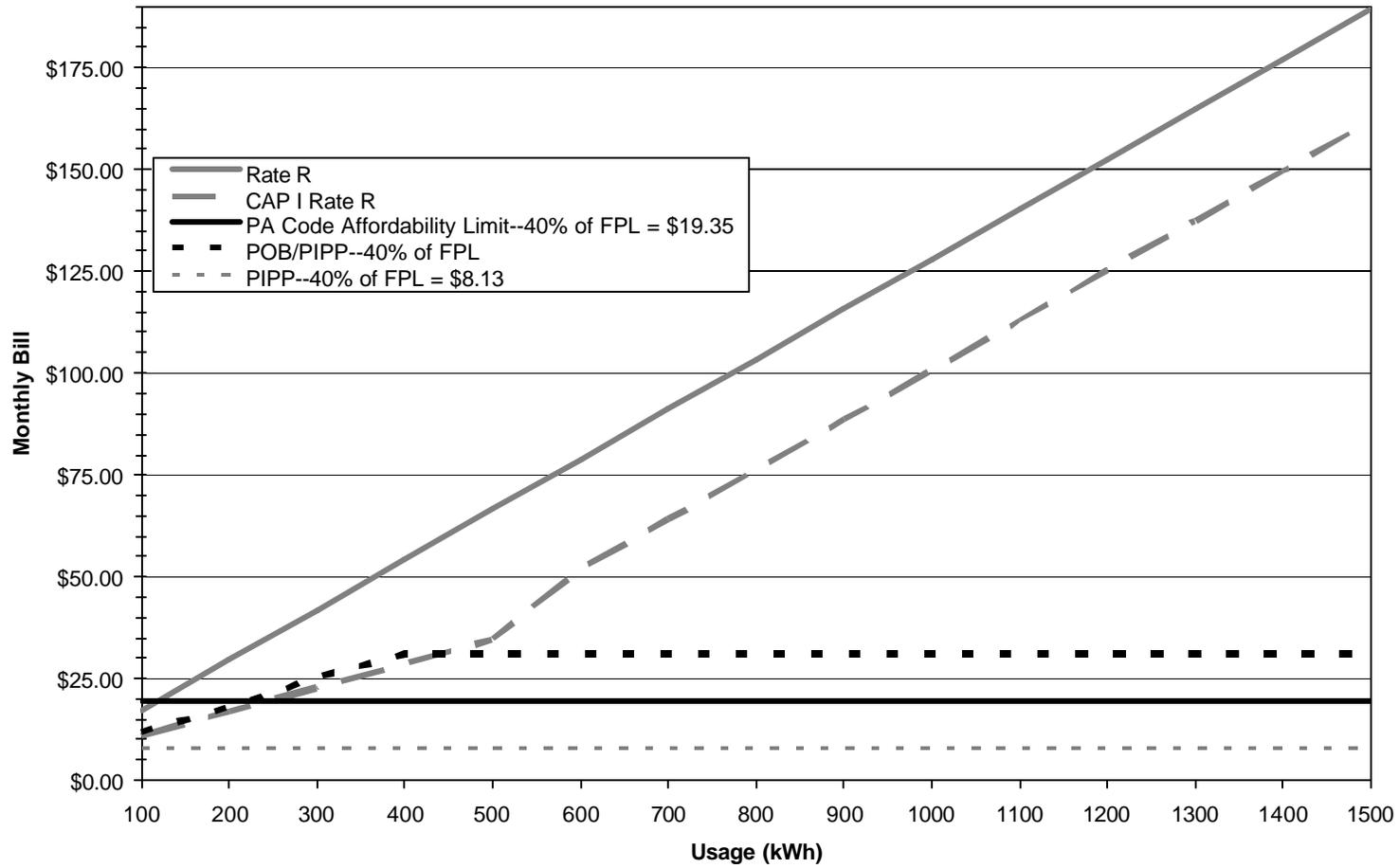
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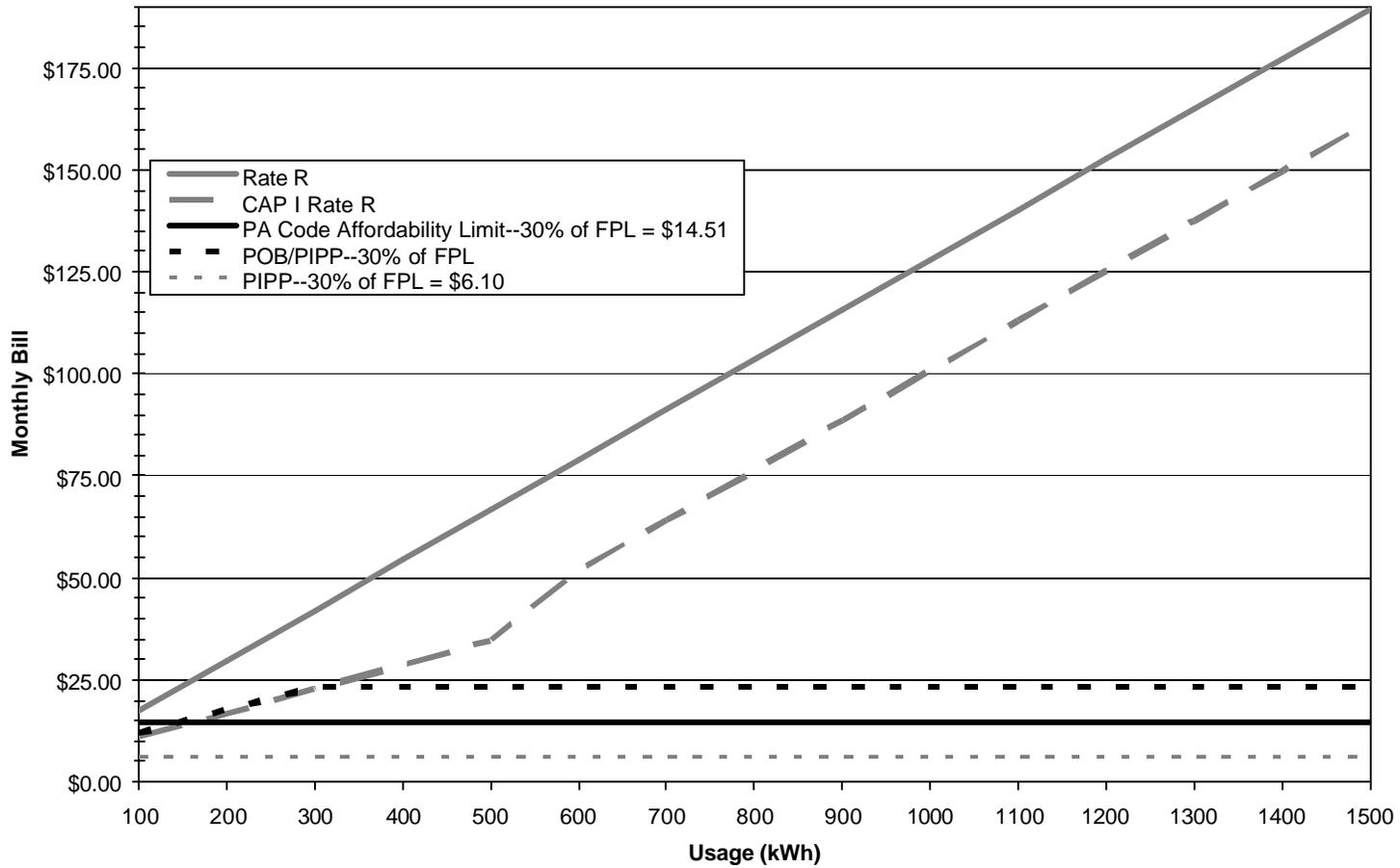
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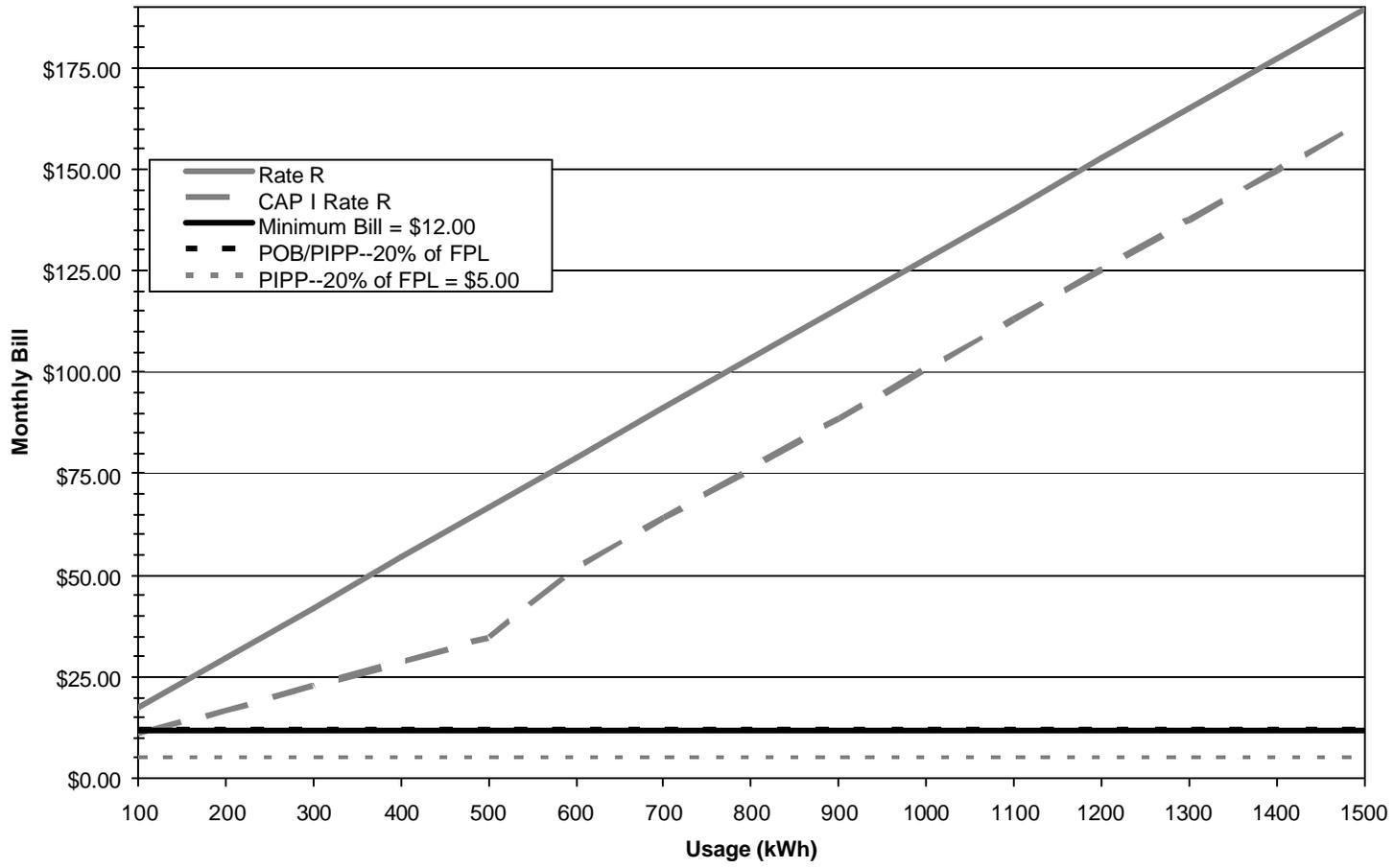
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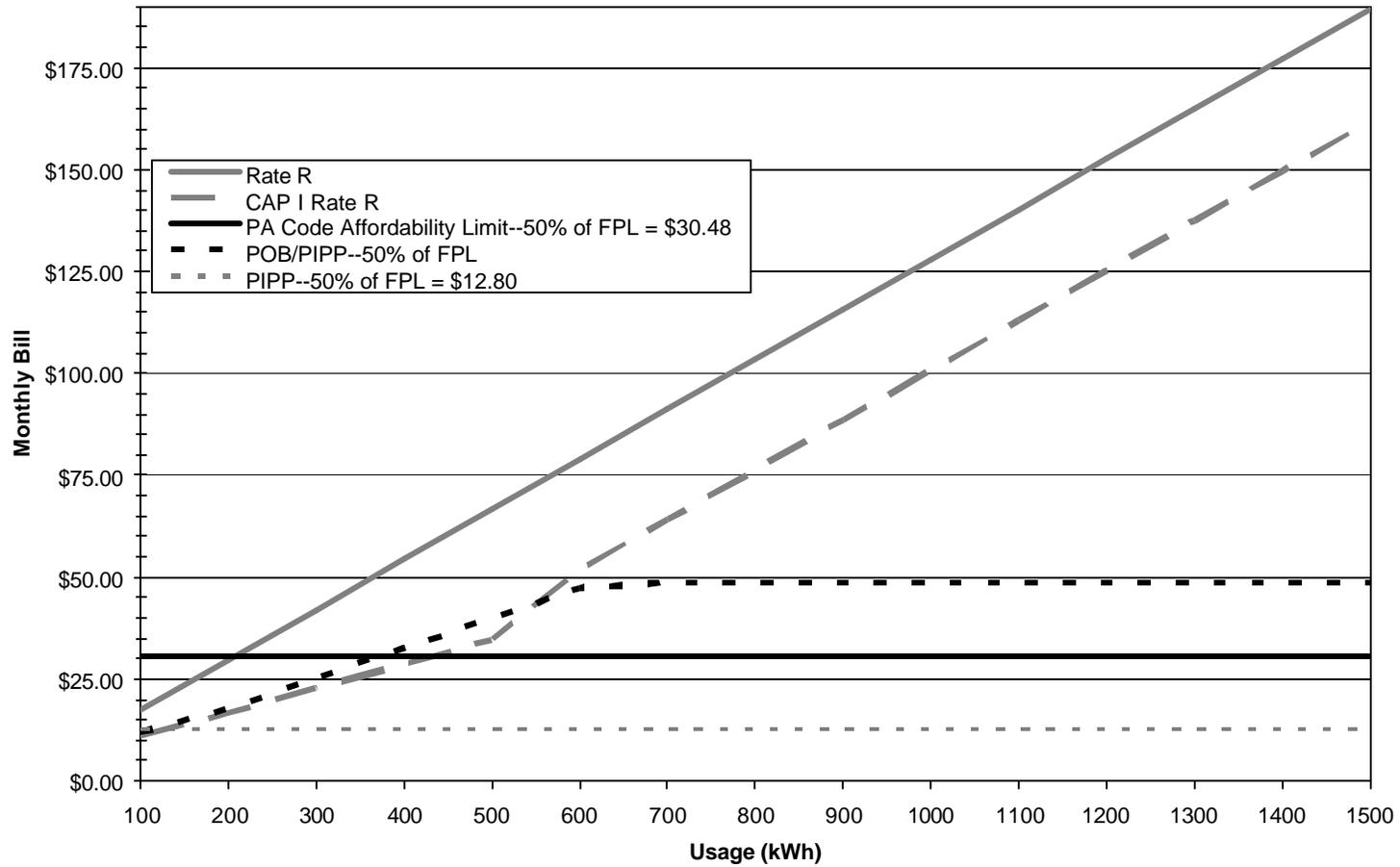
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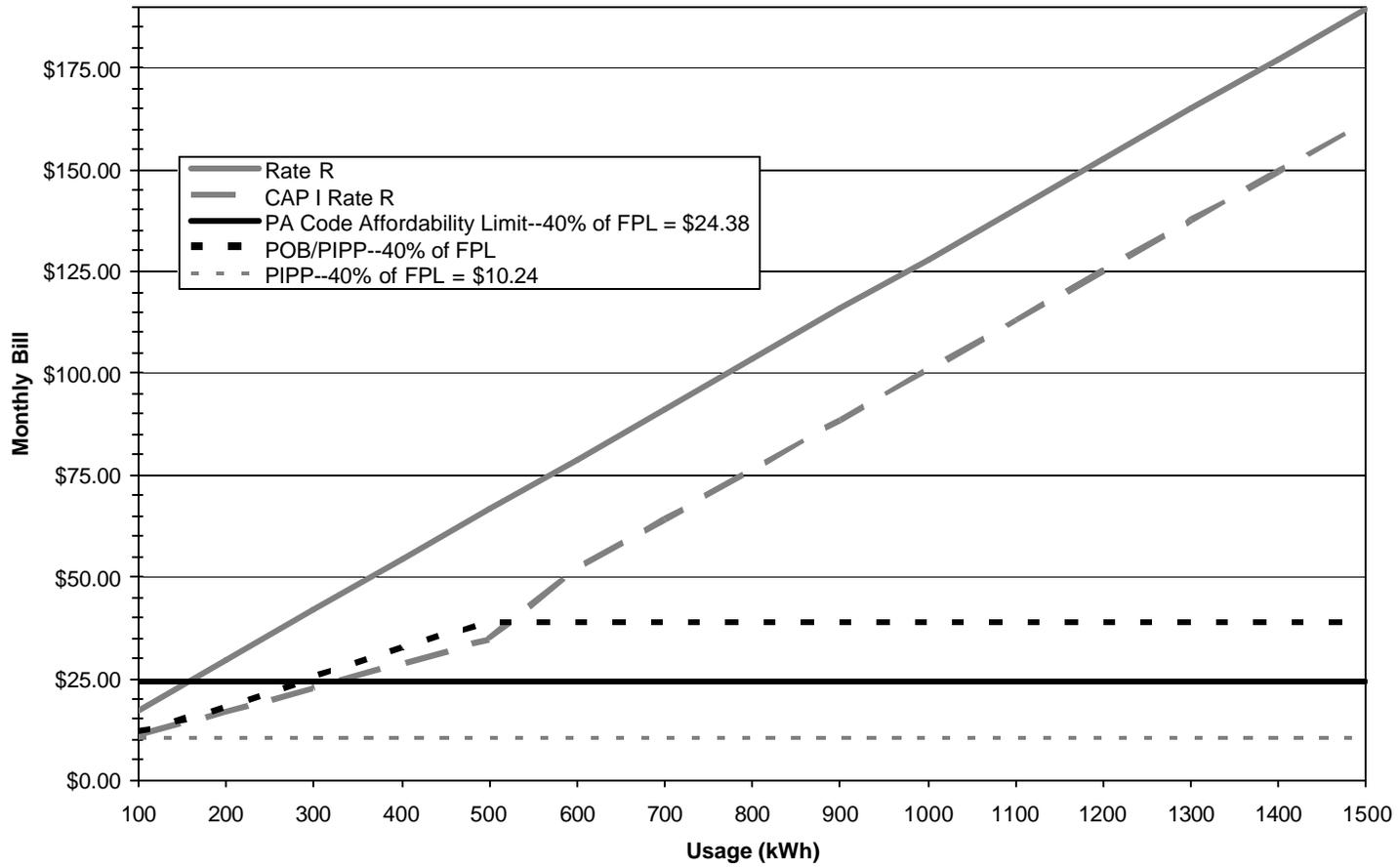
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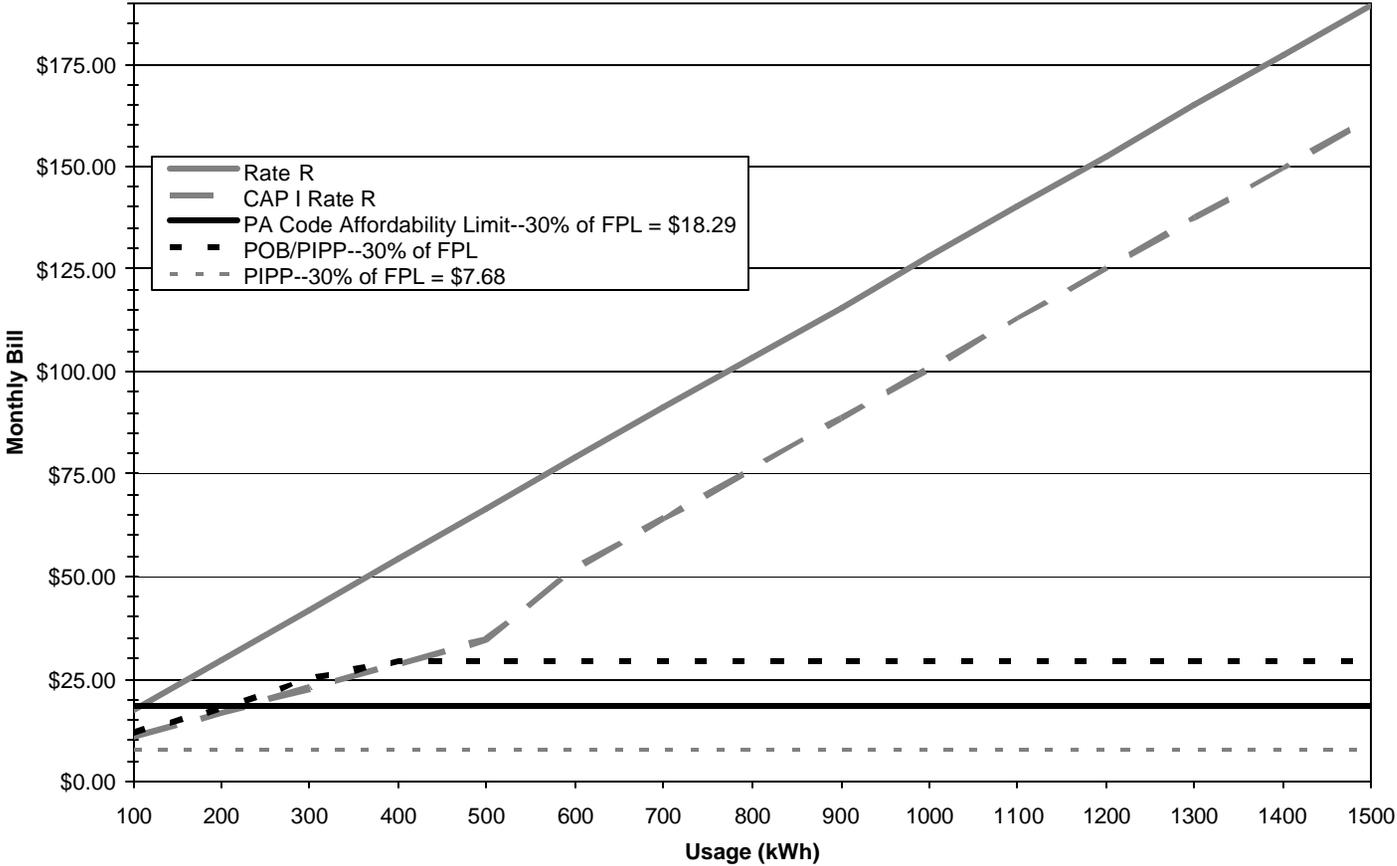
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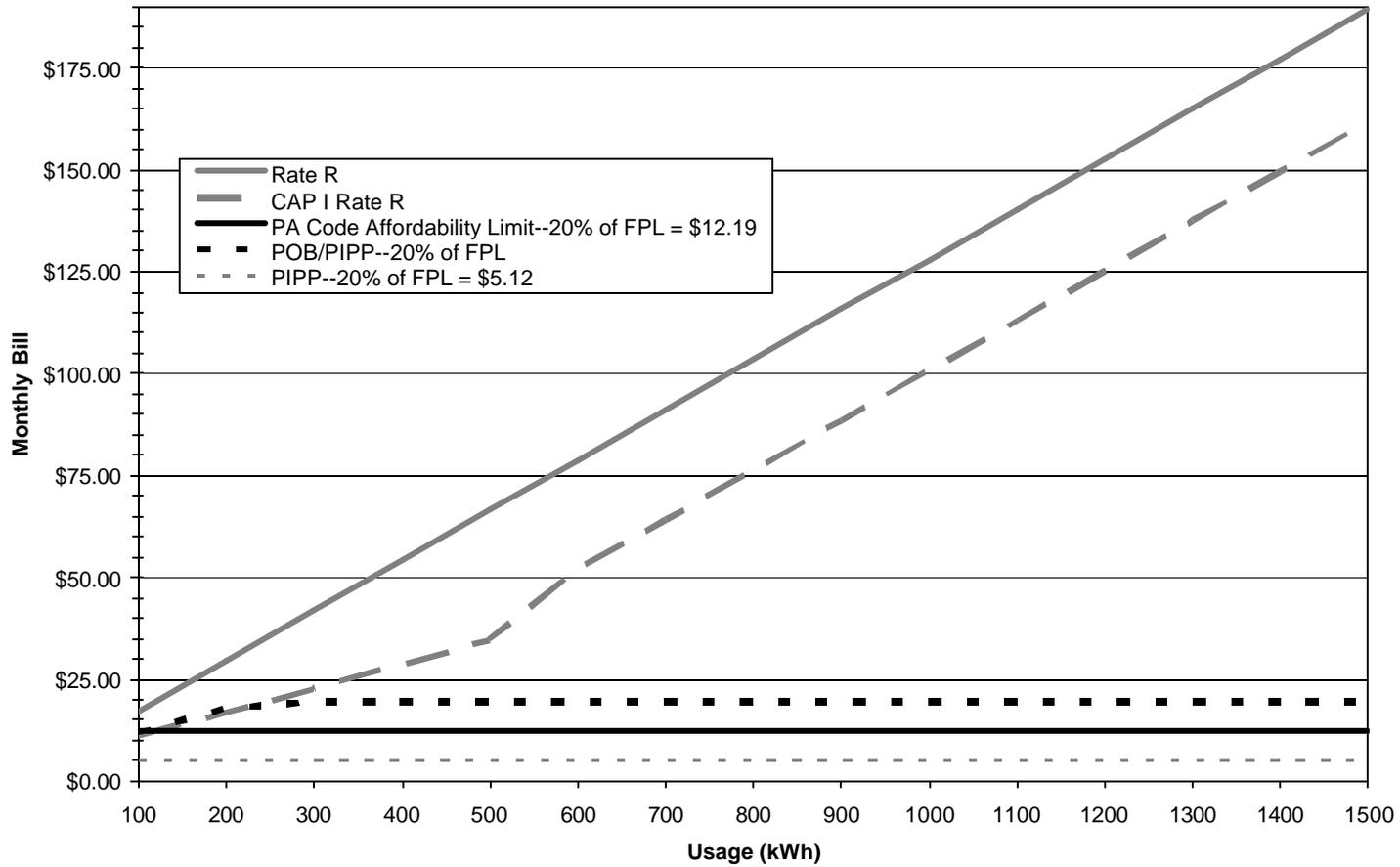
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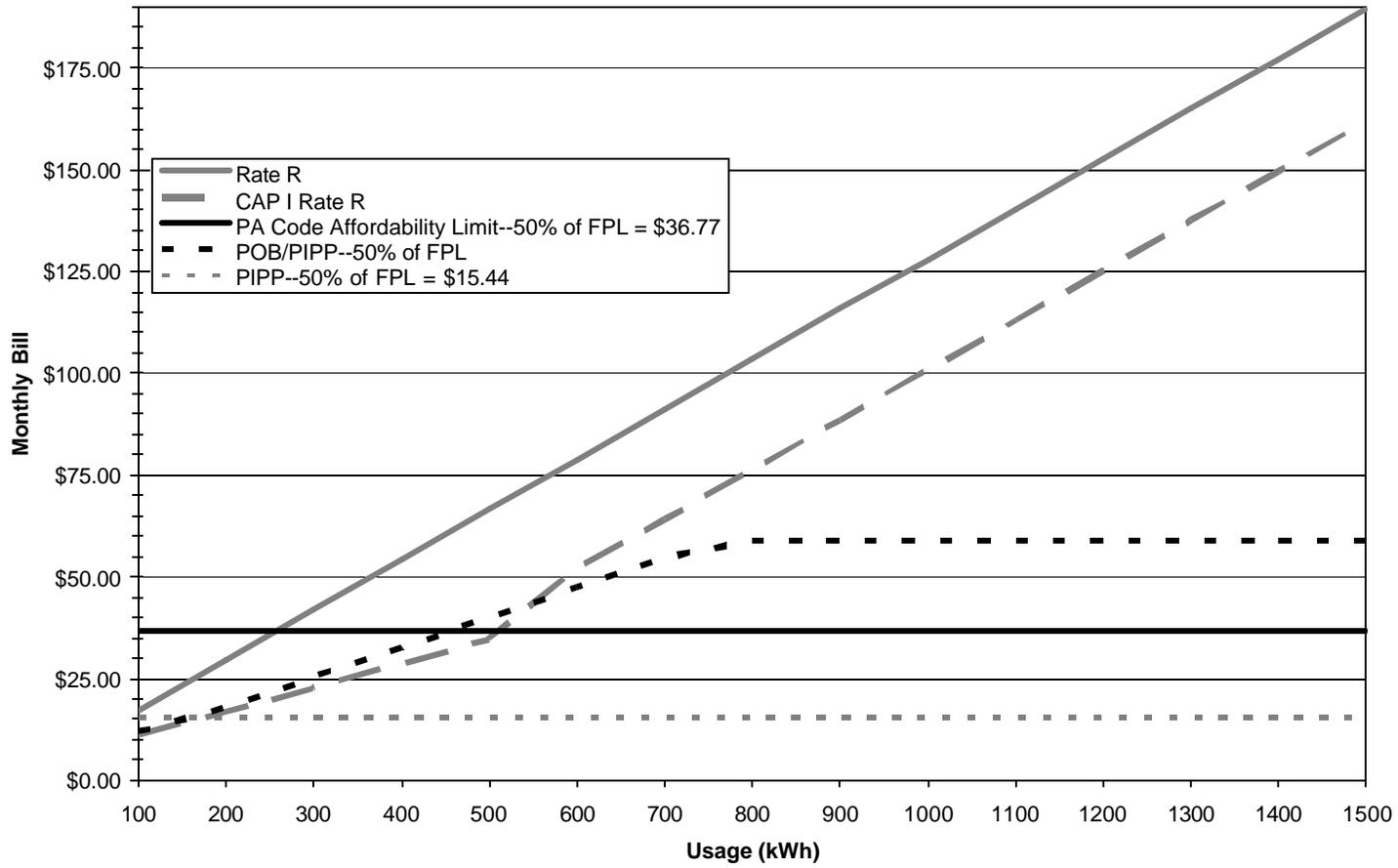
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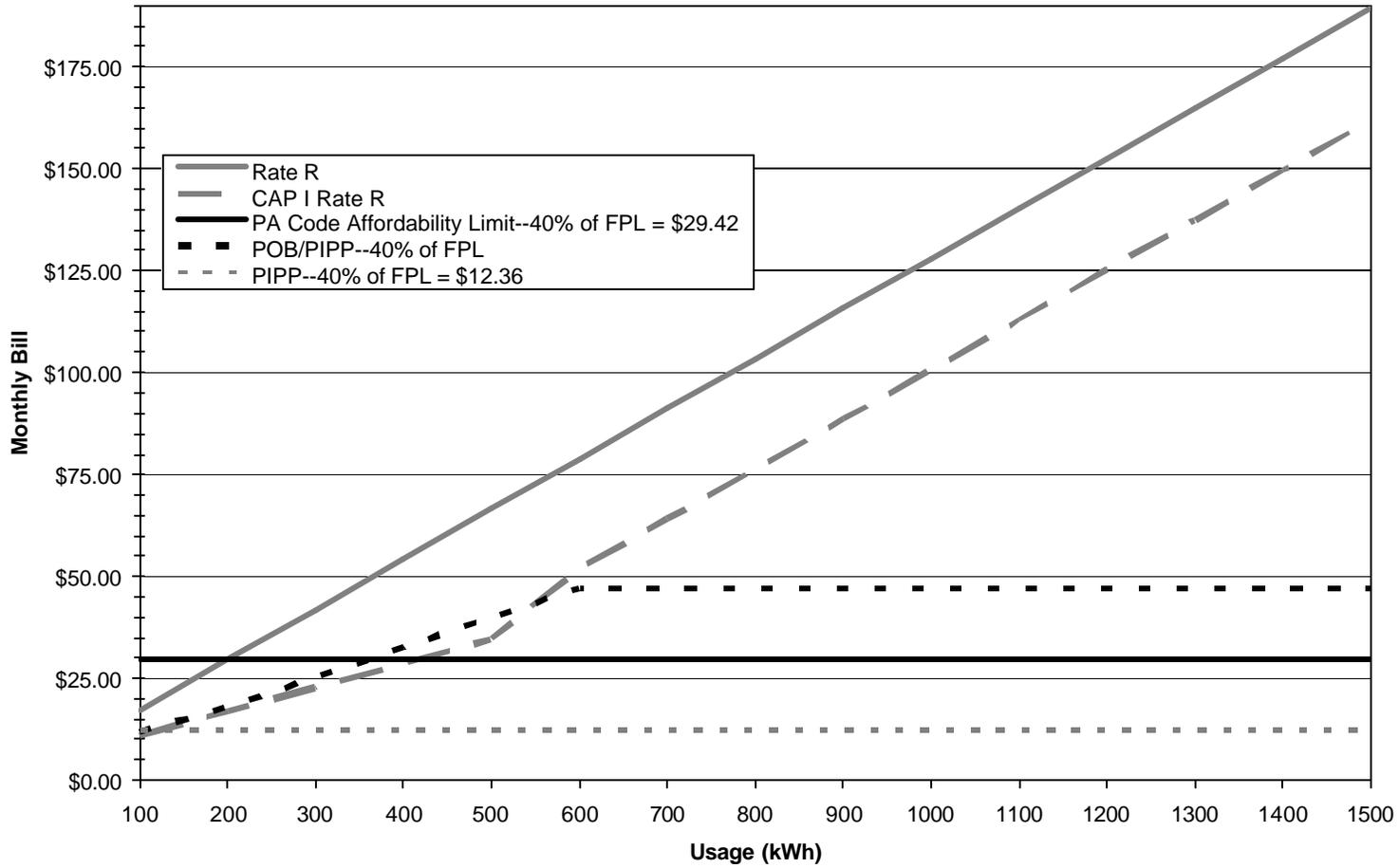
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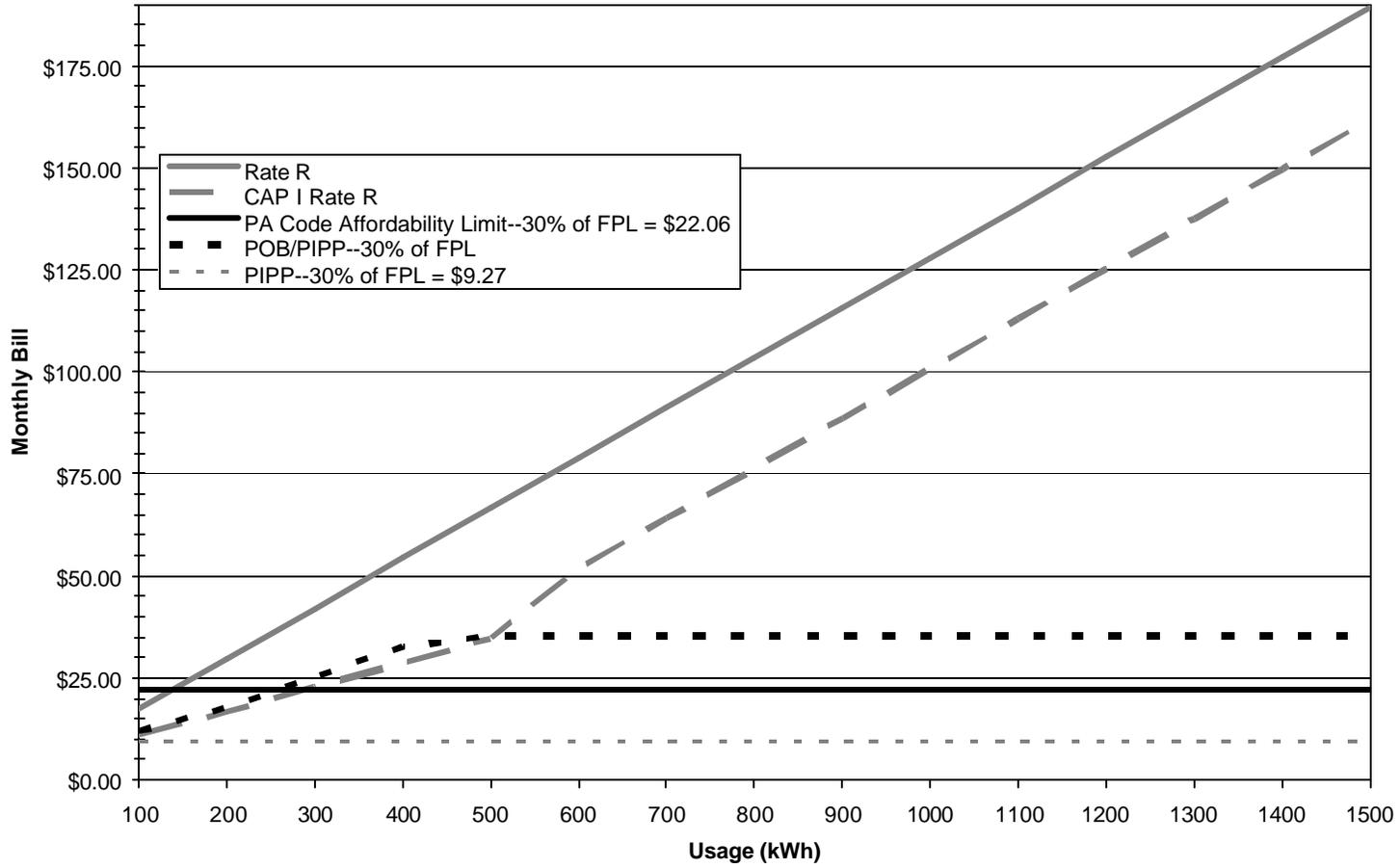
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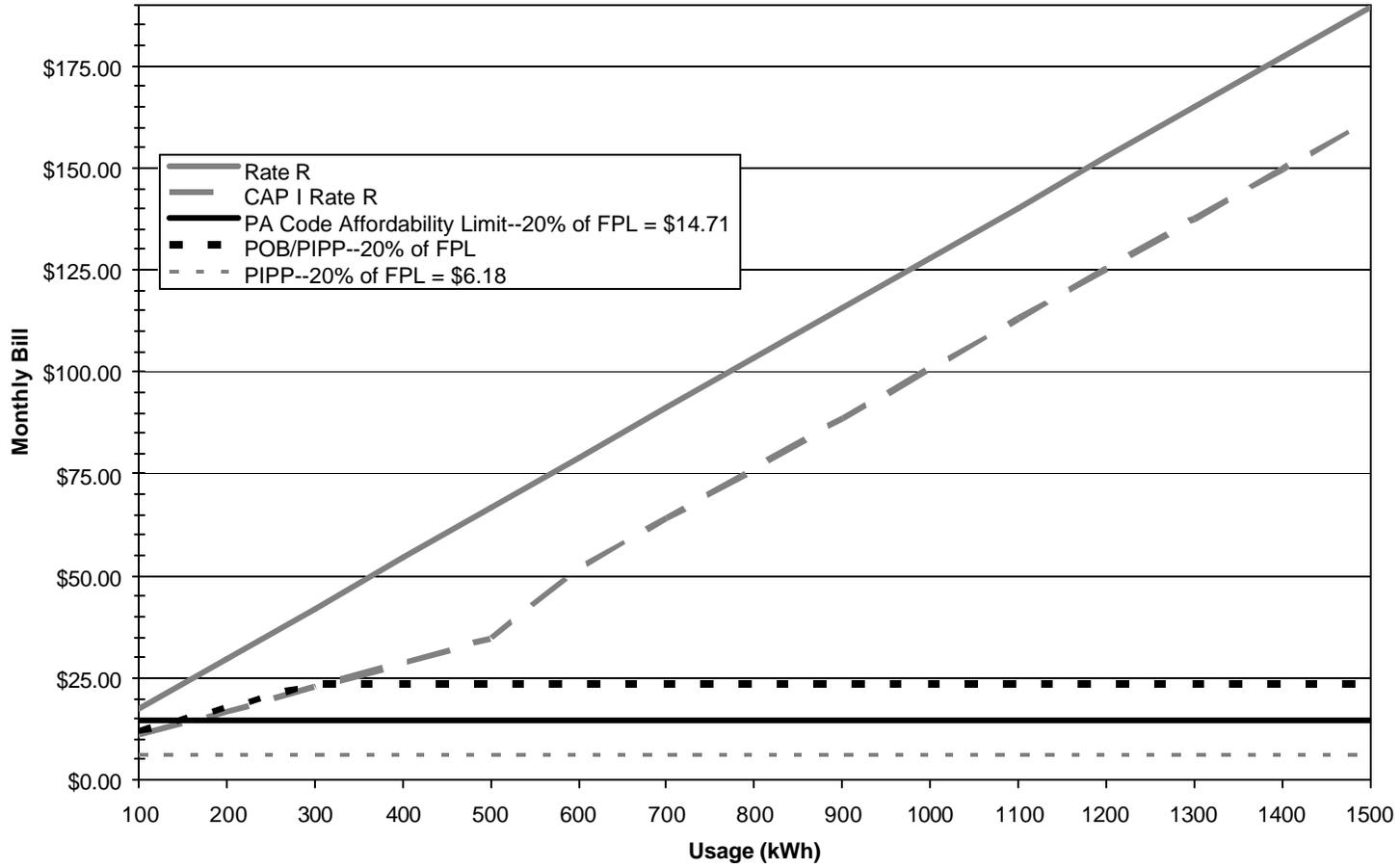
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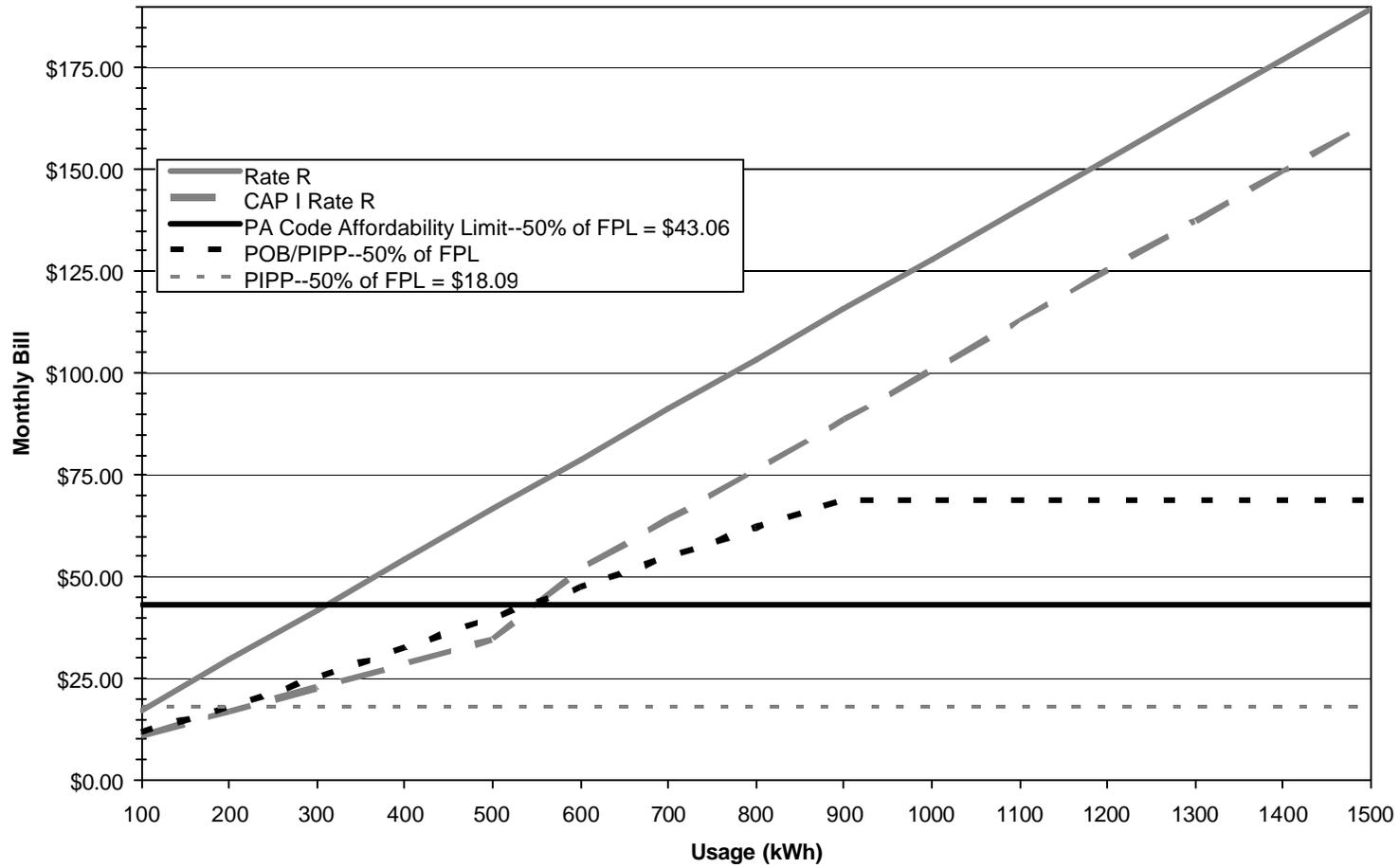
Family Size of Four--Winter Rate R Comparison Chart
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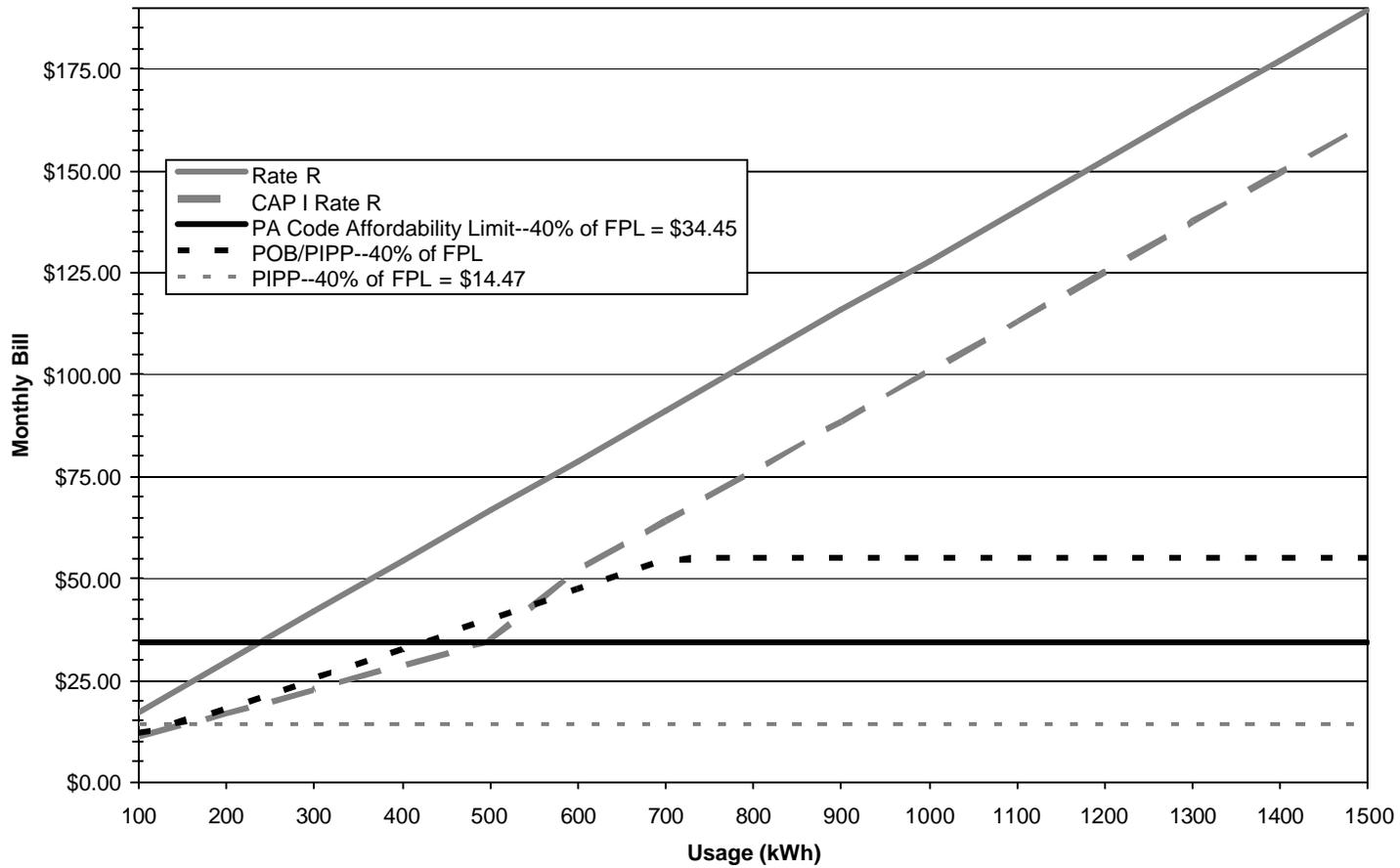
Family Size of Four--Winter Rate R Comparison Chart
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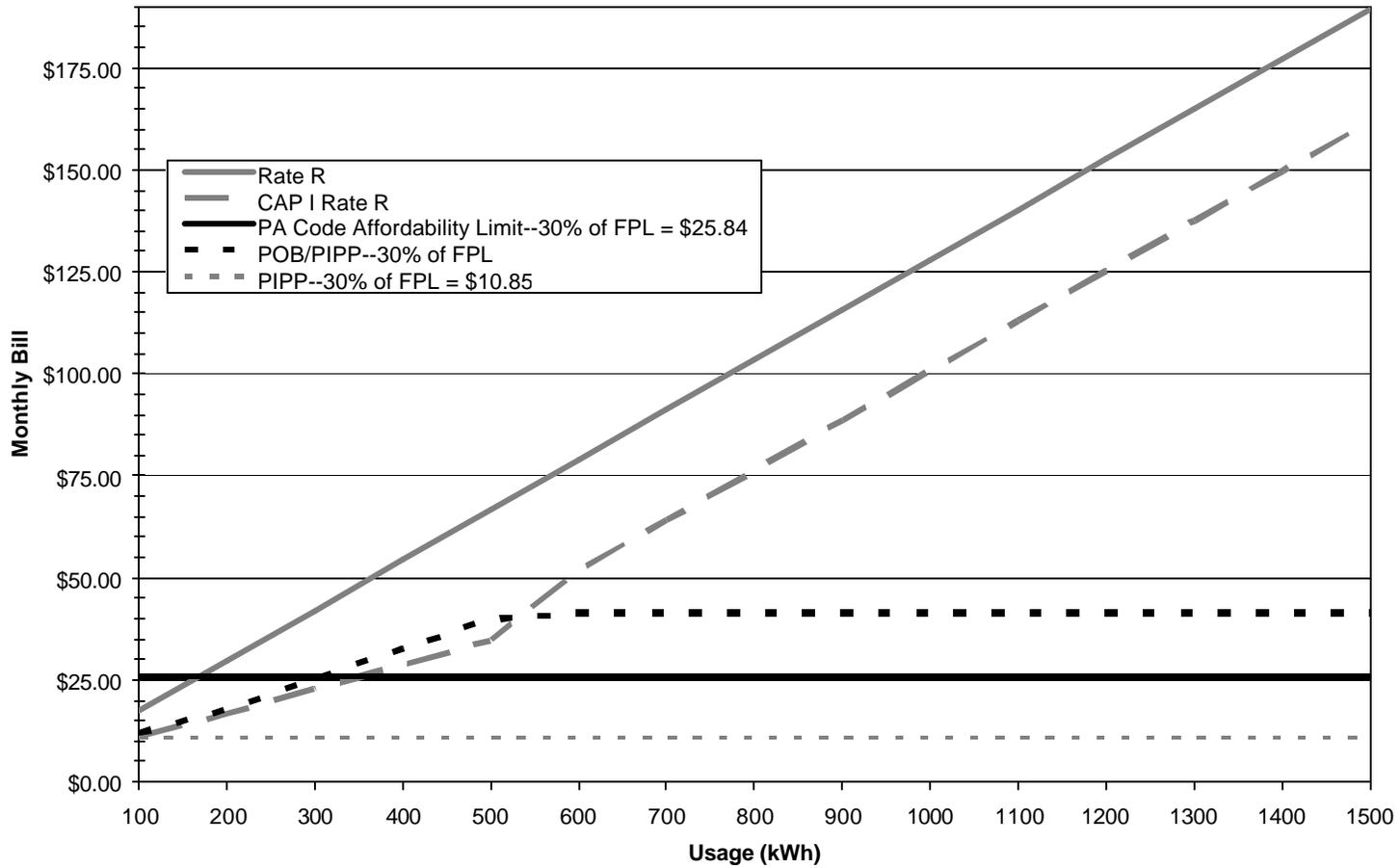
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50% of Federal Poverty Level**



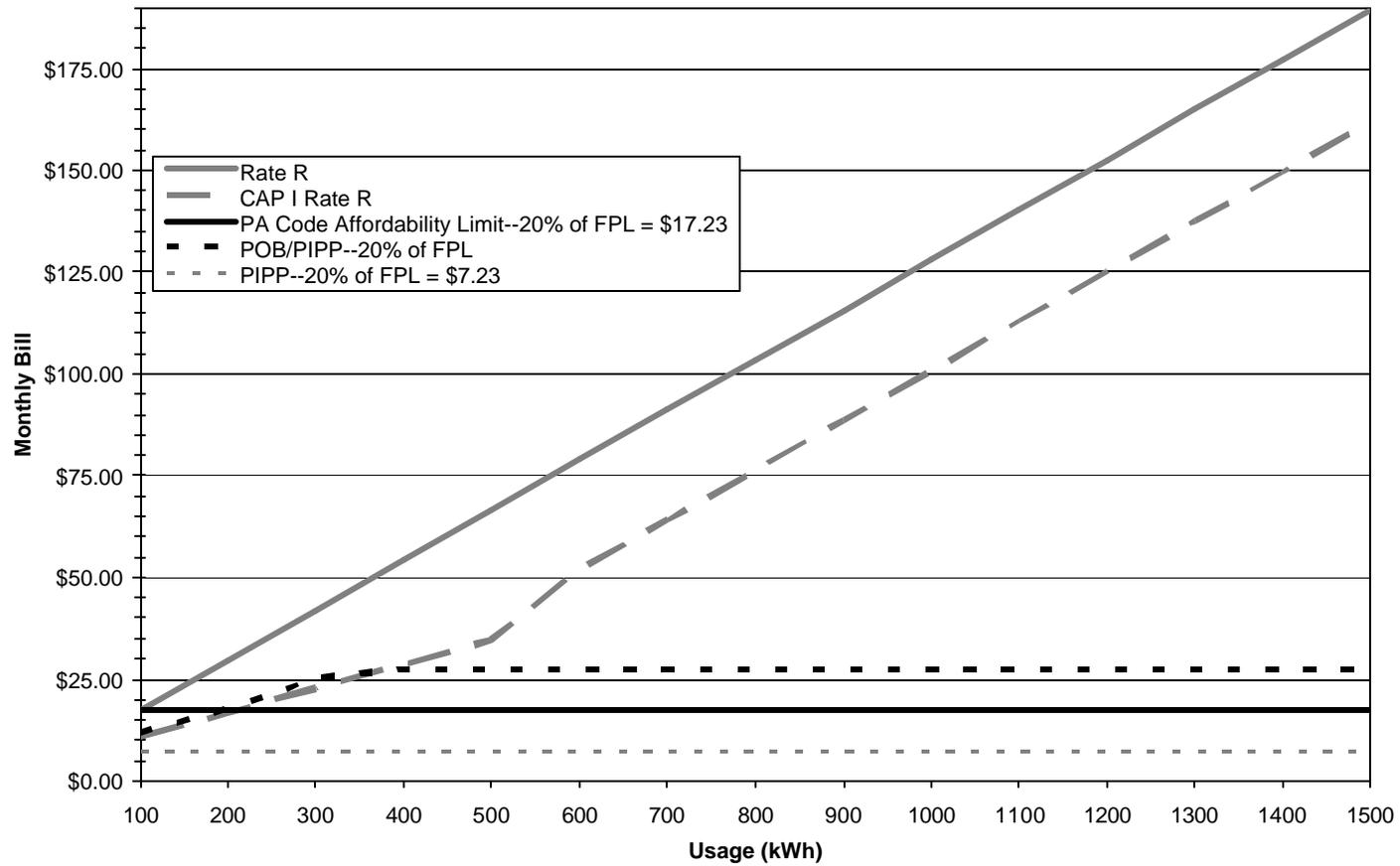
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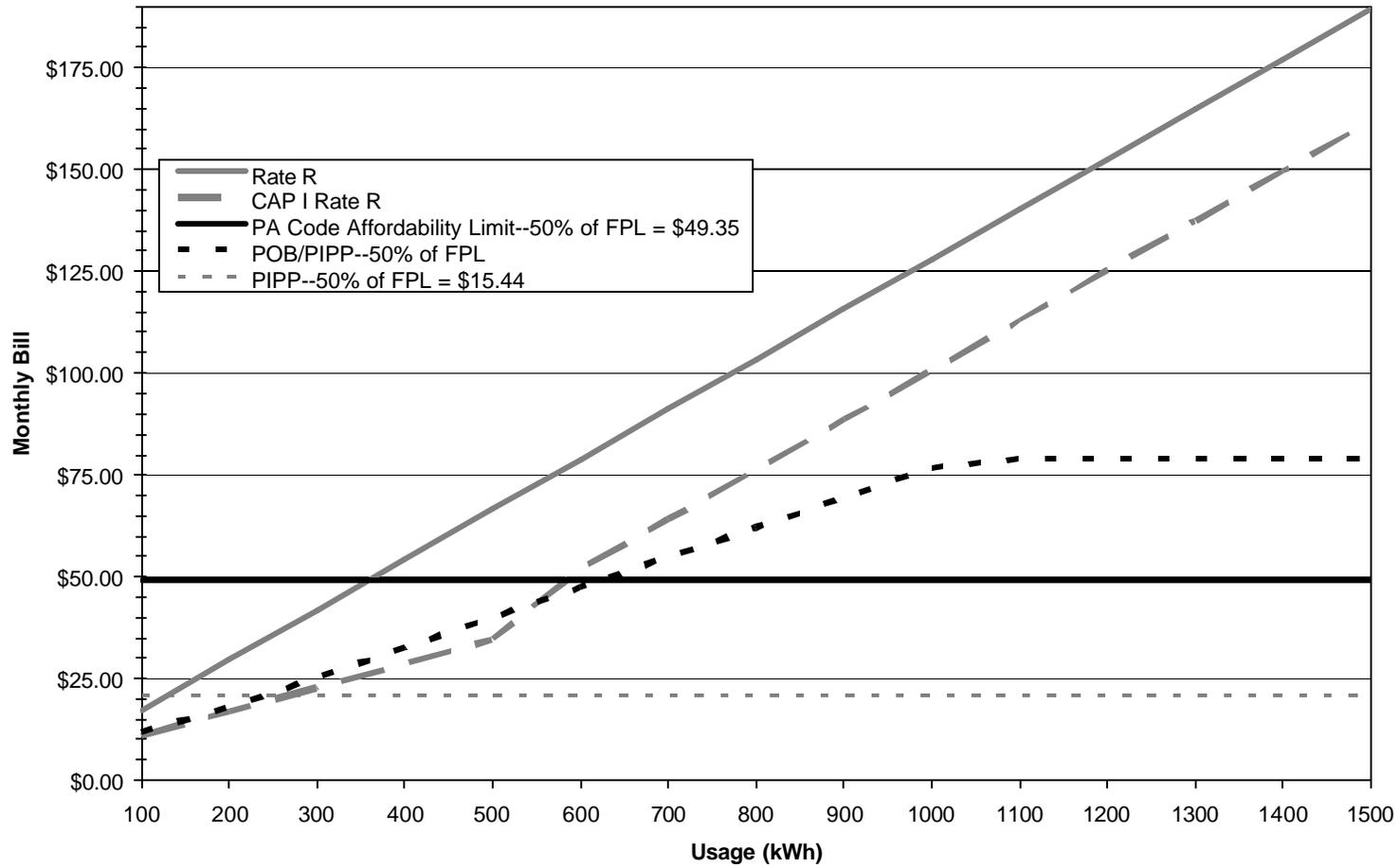
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30% of Federal Poverty Level**



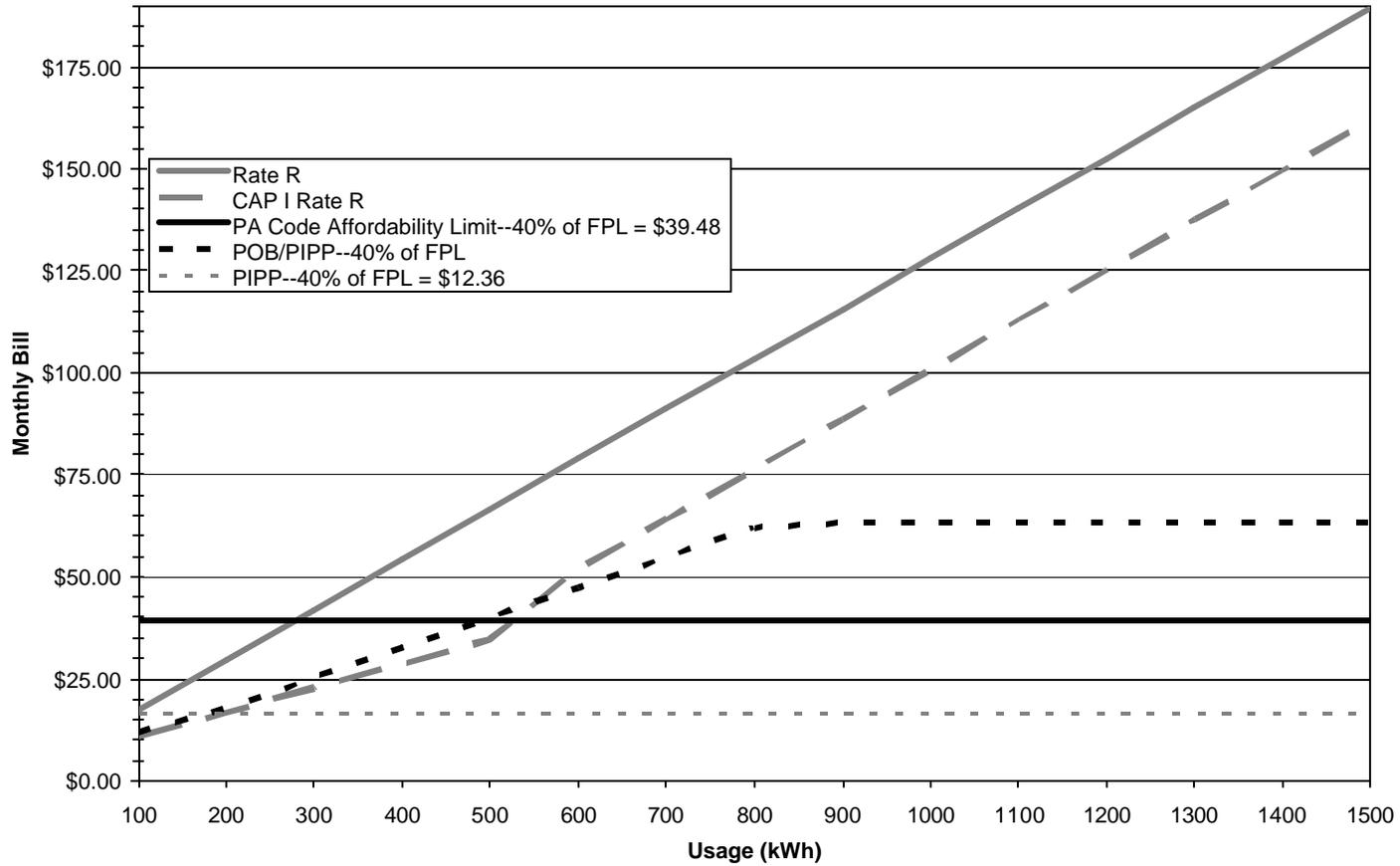
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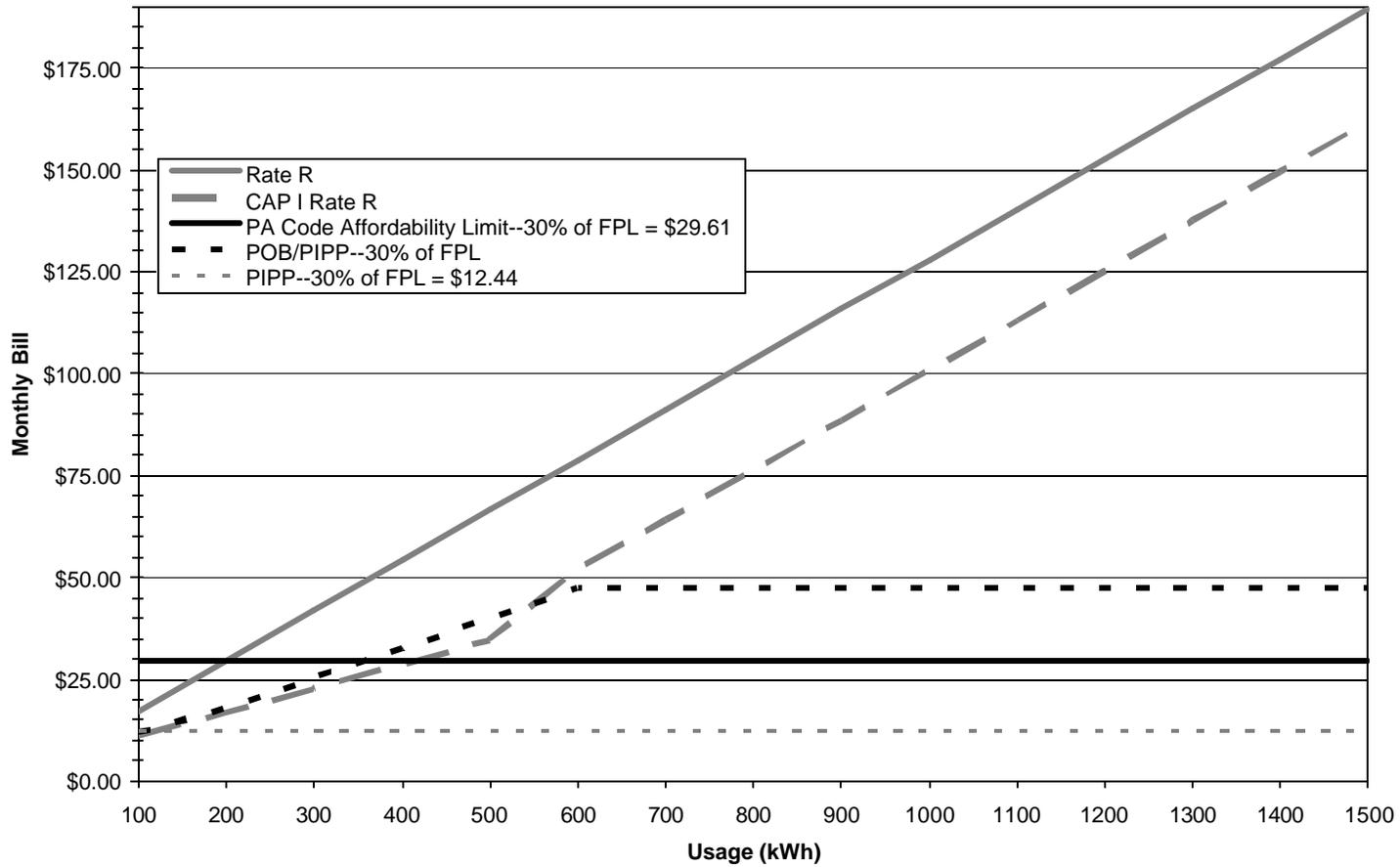
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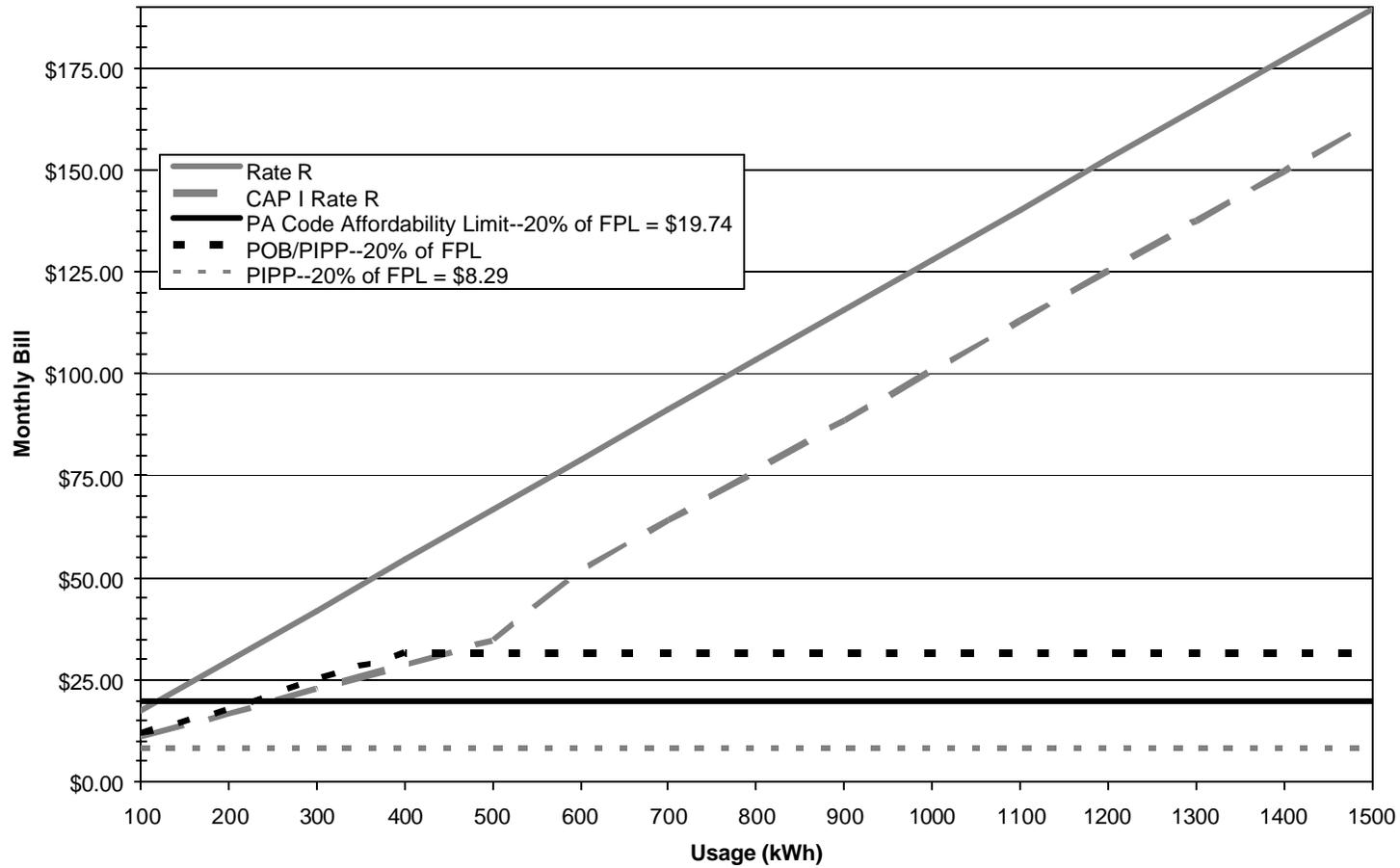
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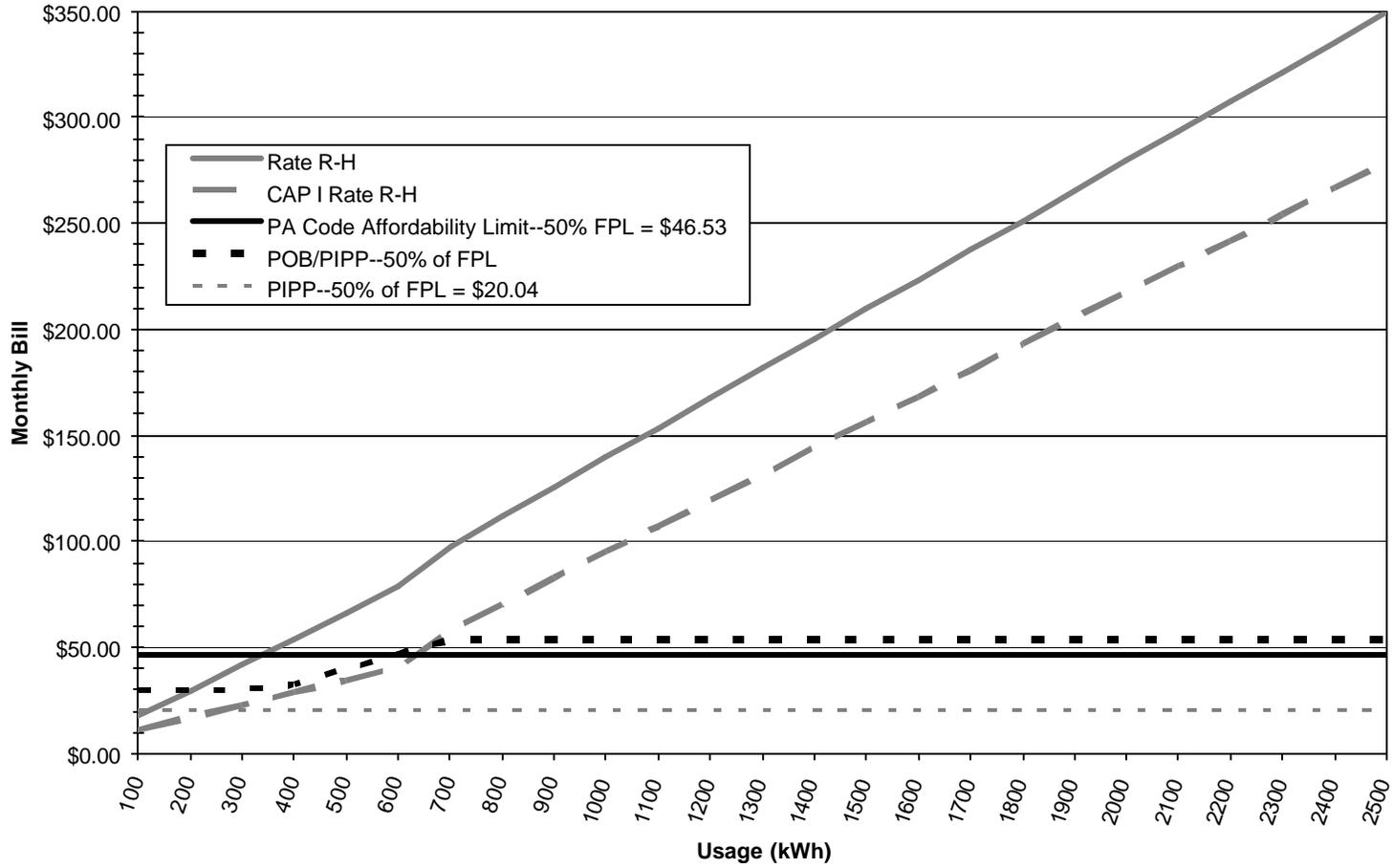
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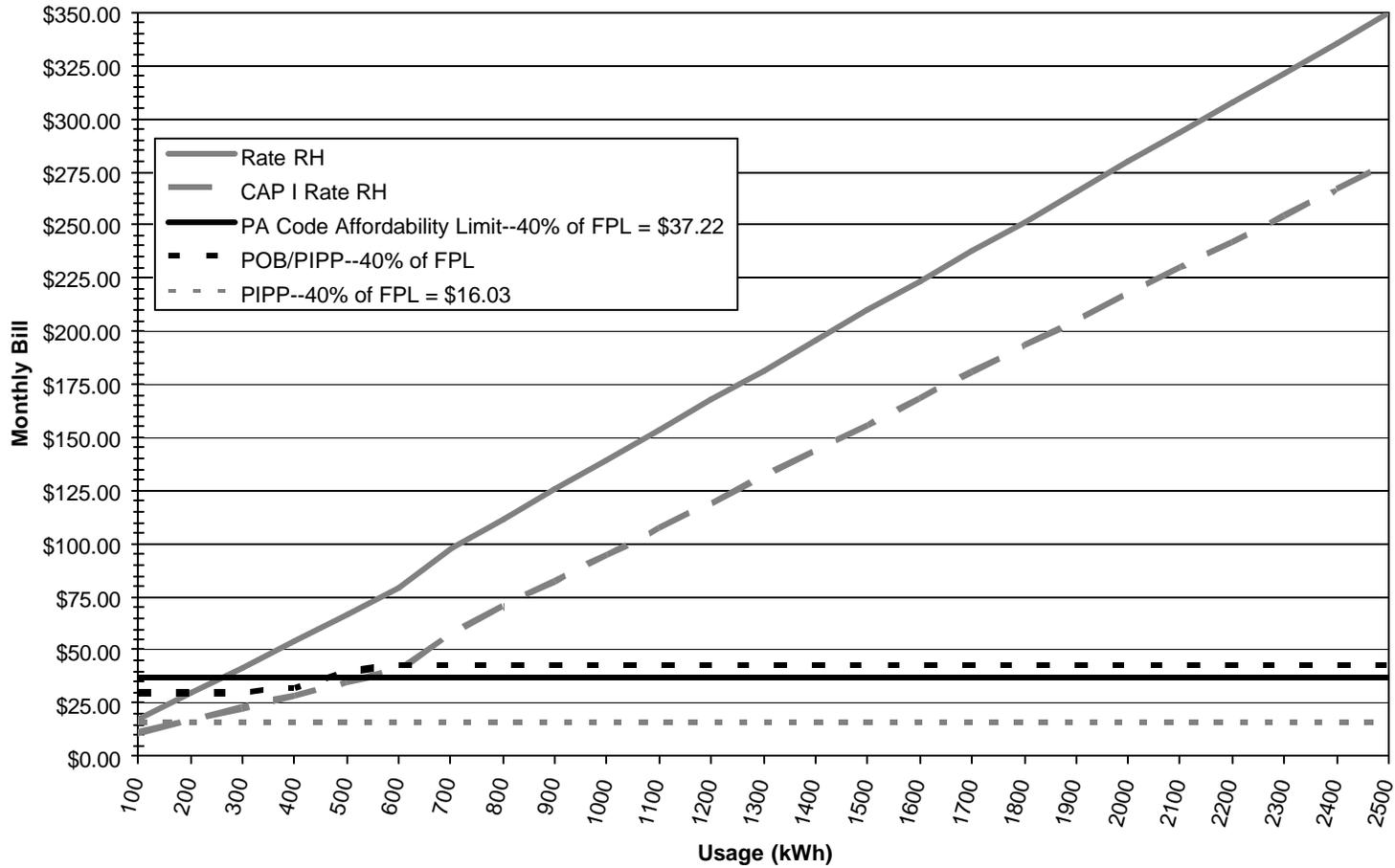
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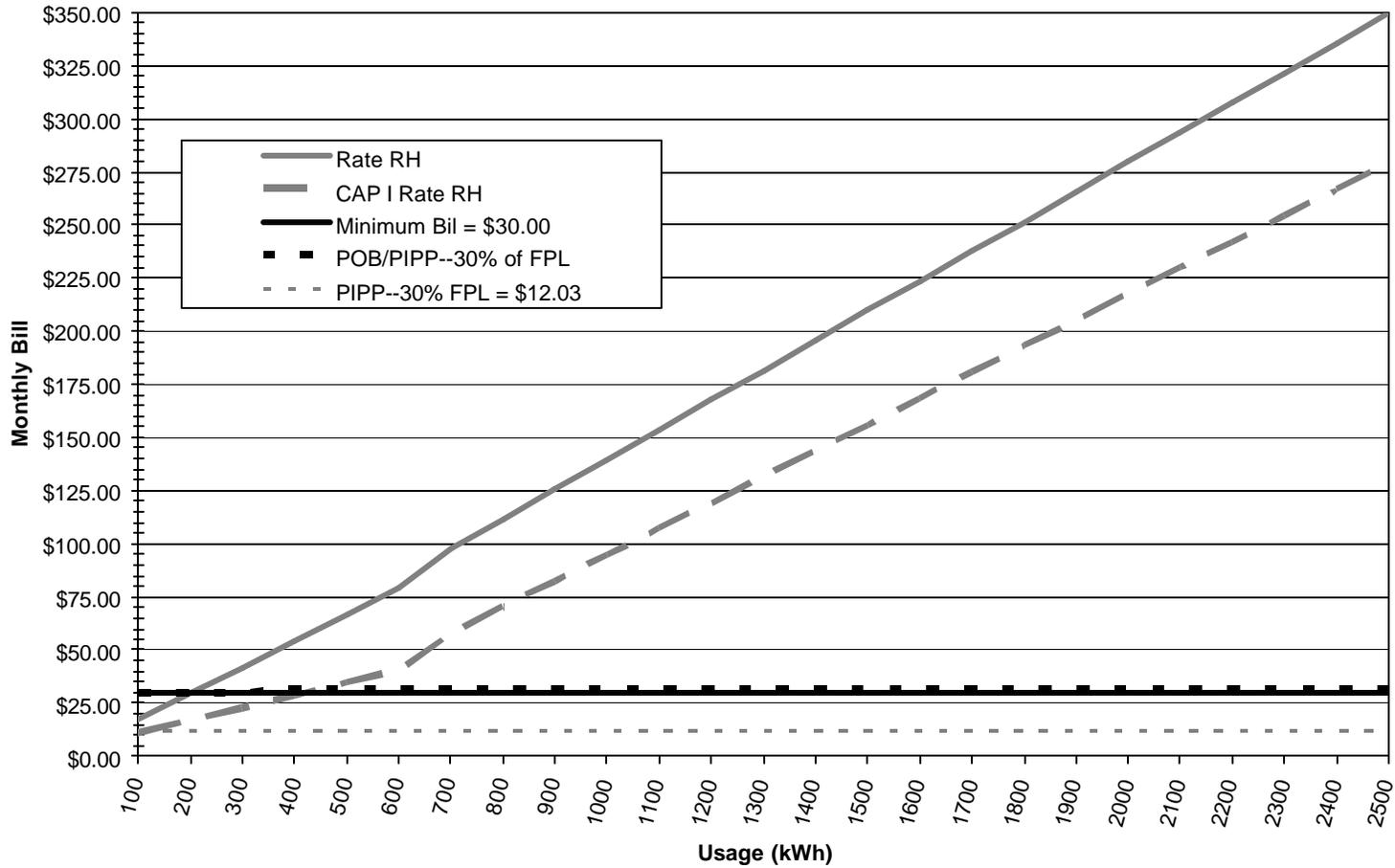
**Family Size of One--Summer Rate R-H Comparison Chart
50% of Federal Poverty Level**



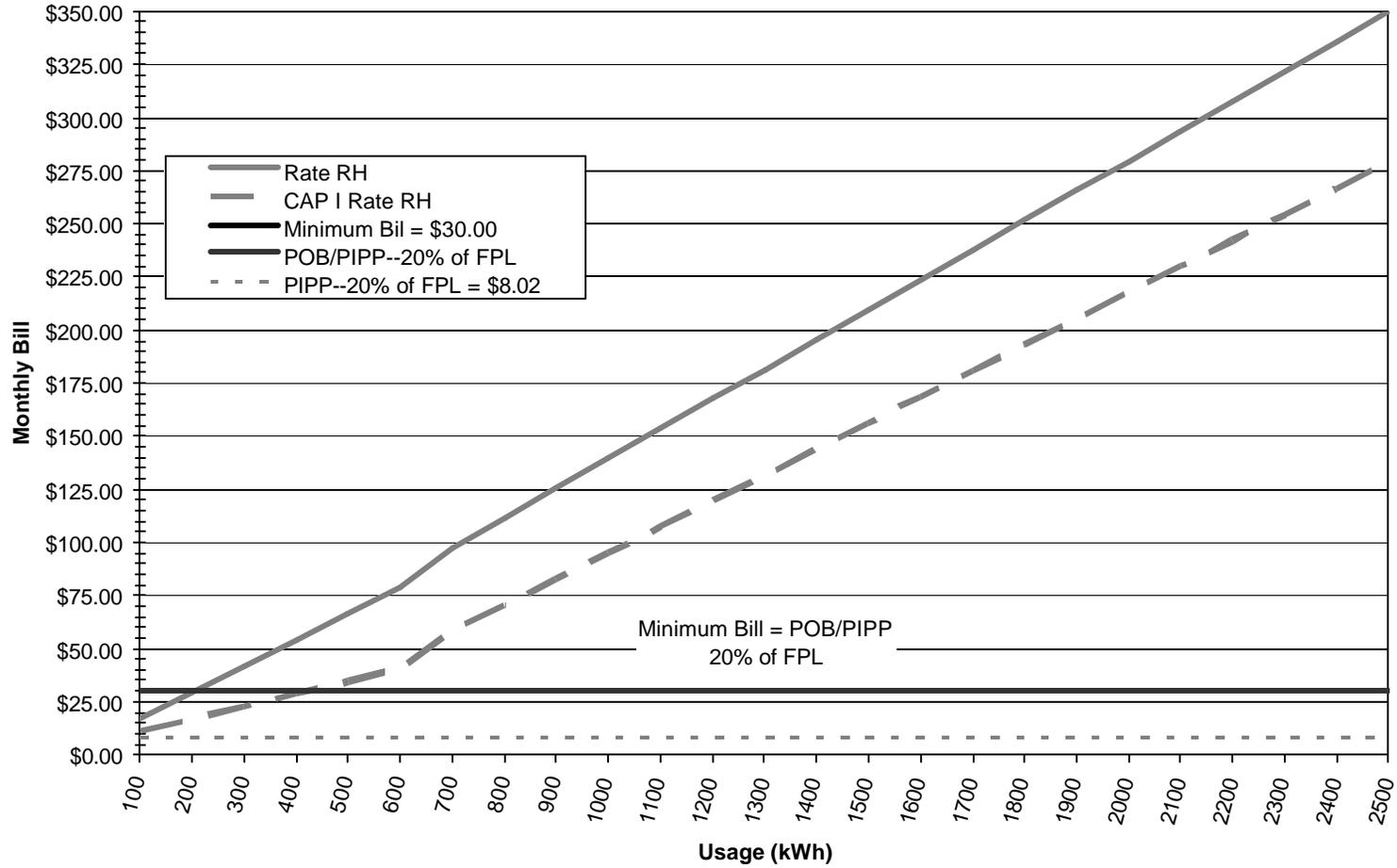
**Family Size of One--Summer Rate RH Comparison Chart
40% of Federal Poverty Level**



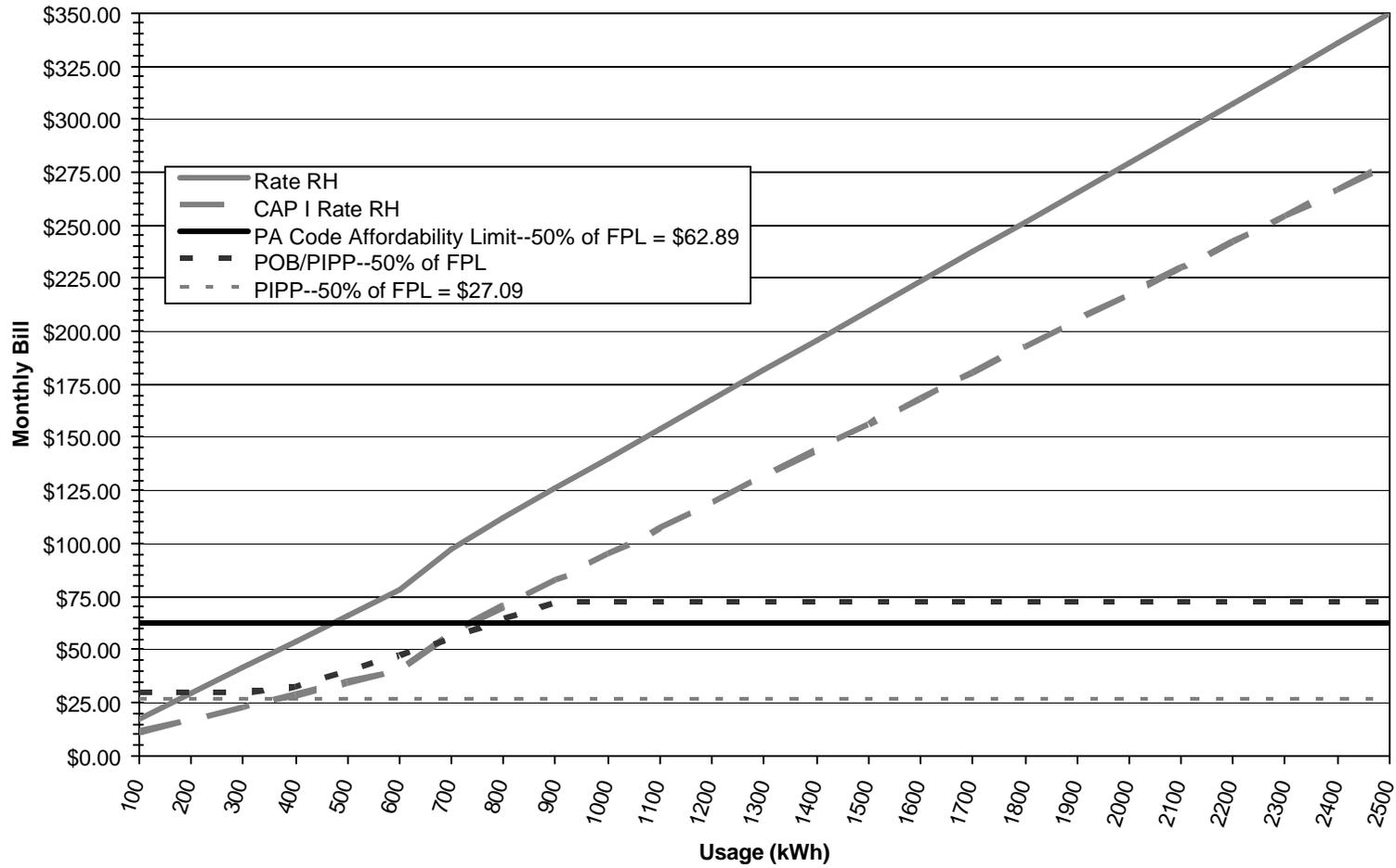
**Family Size of One--Summer Rate RH Comparison Chart
30% of Federal Poverty Level**



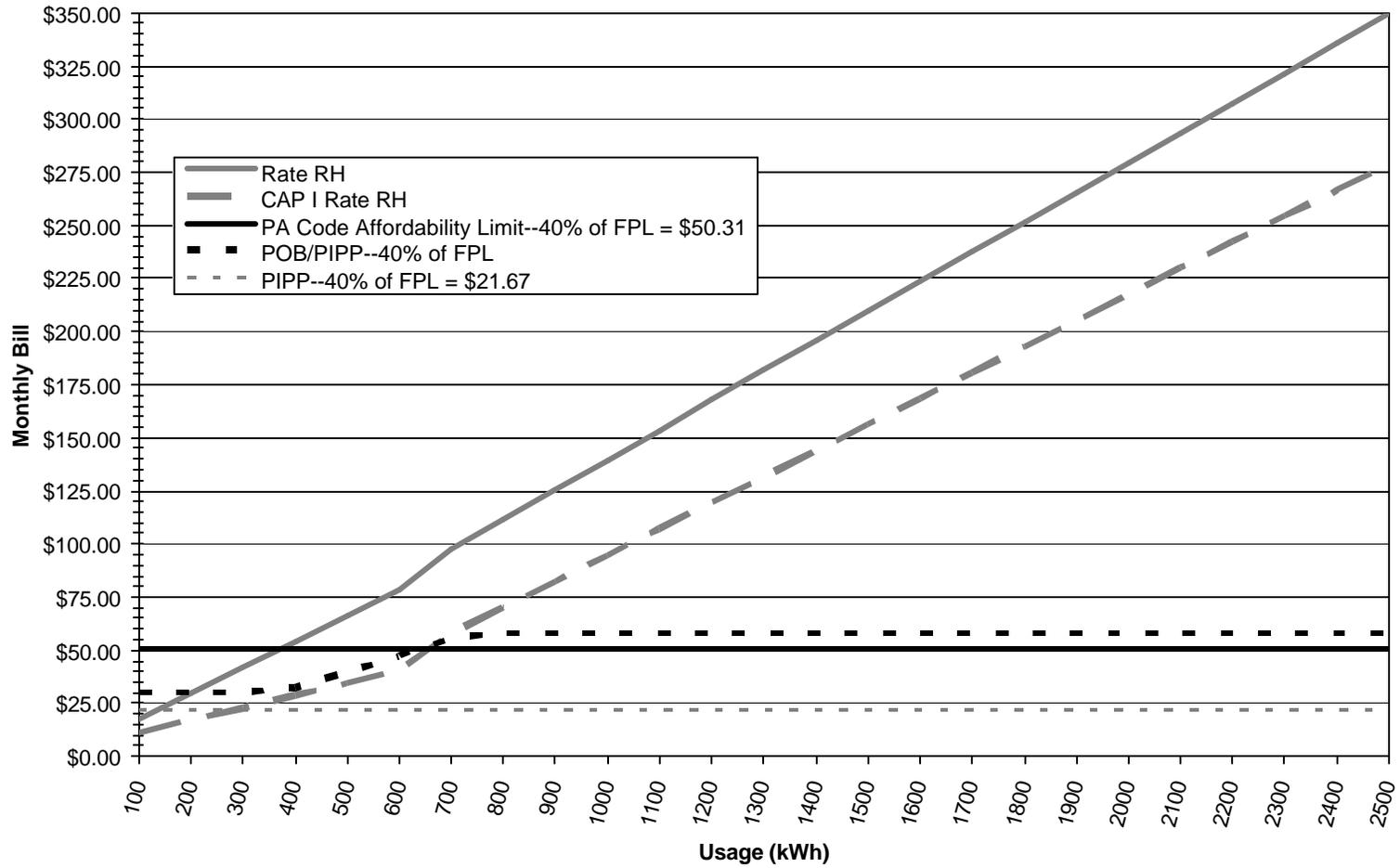
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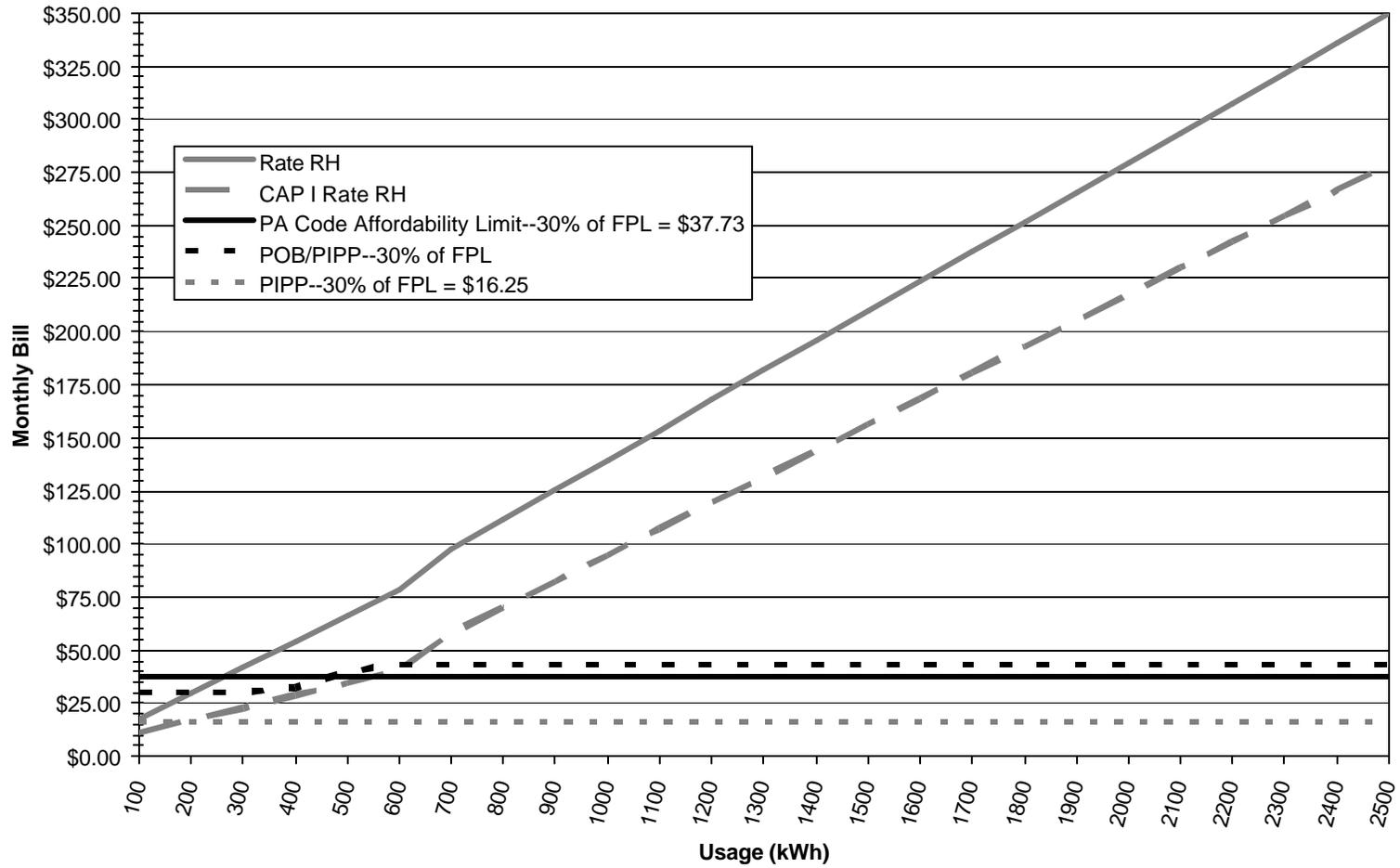
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50% of Federal Poverty Level**



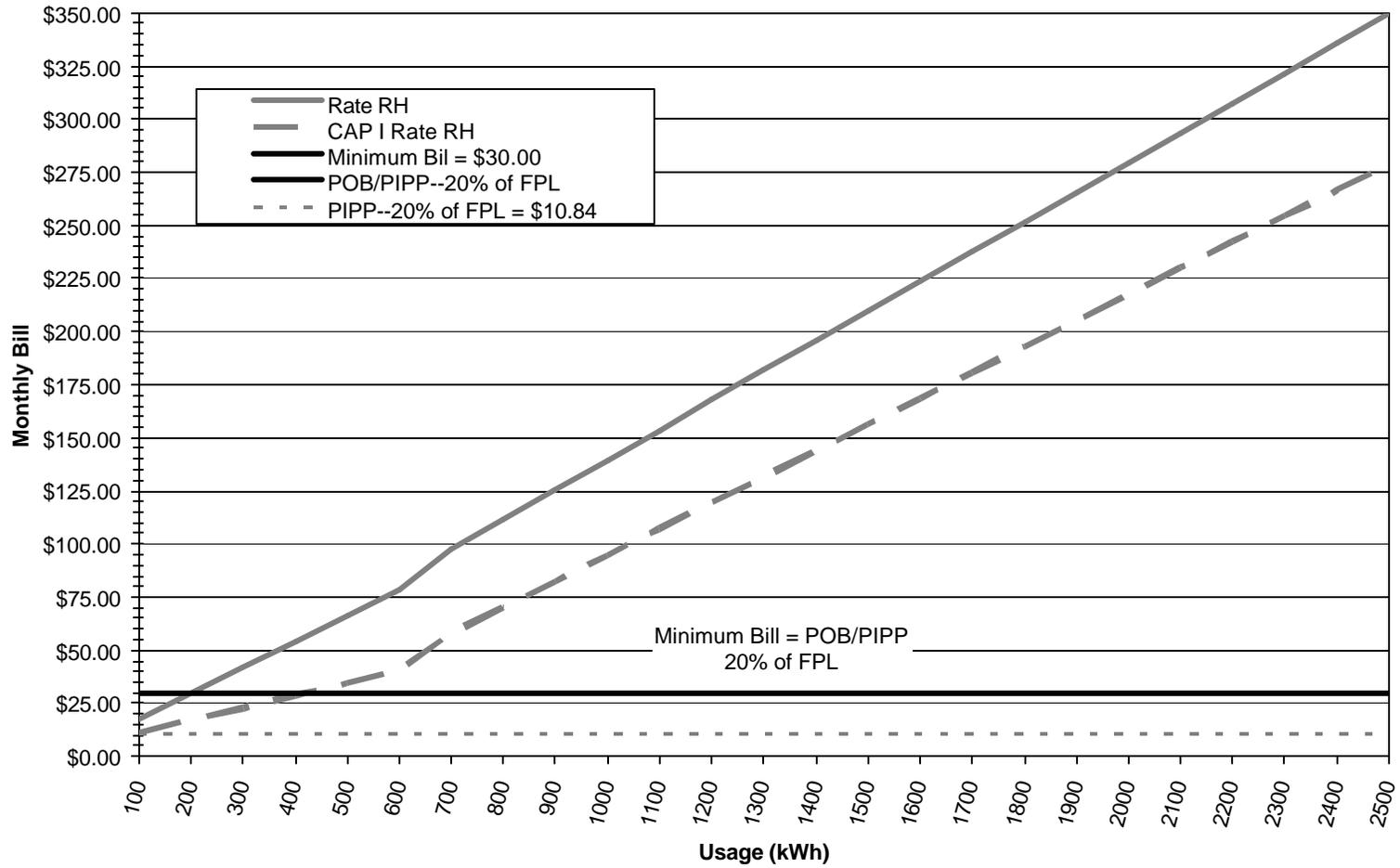
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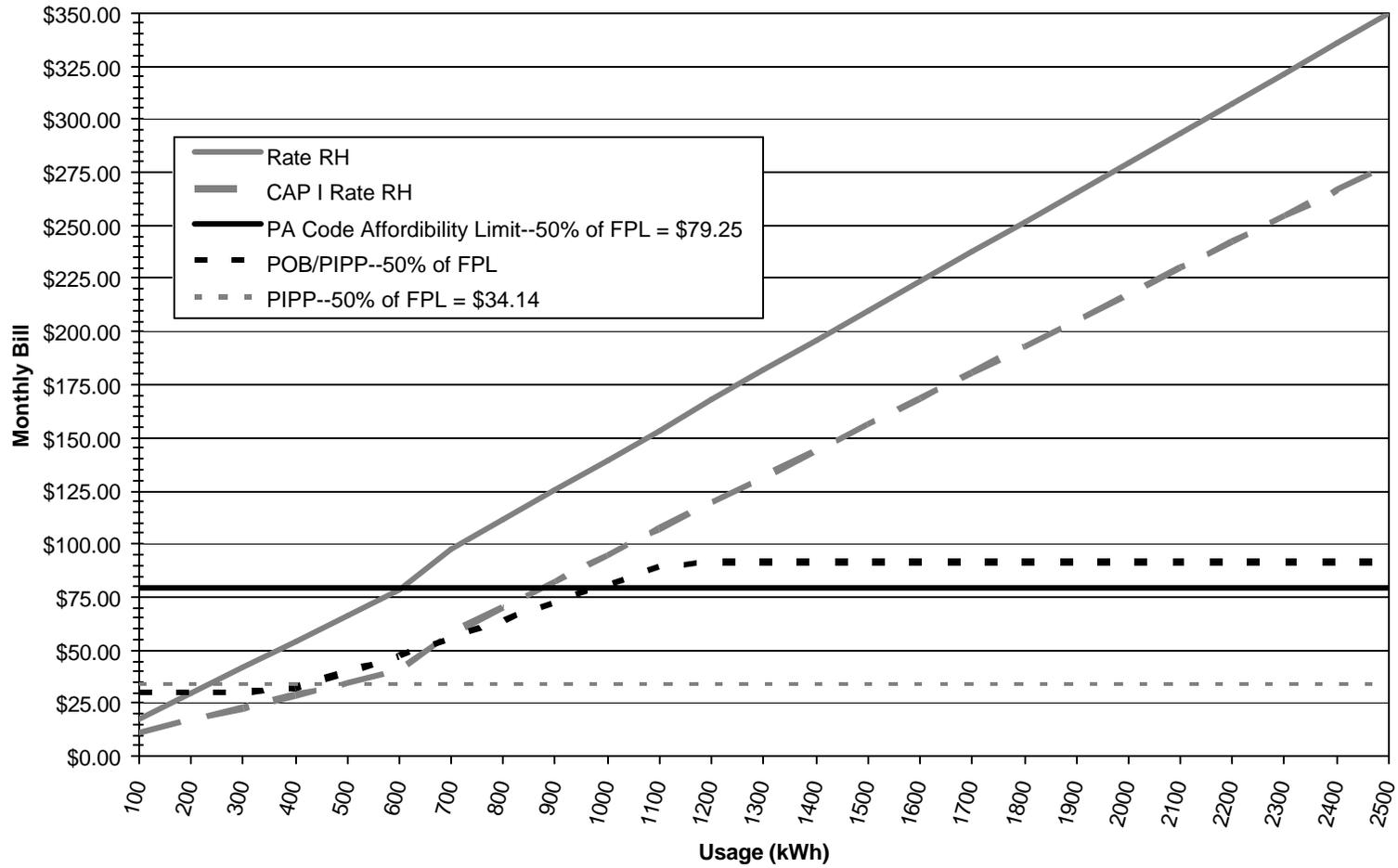
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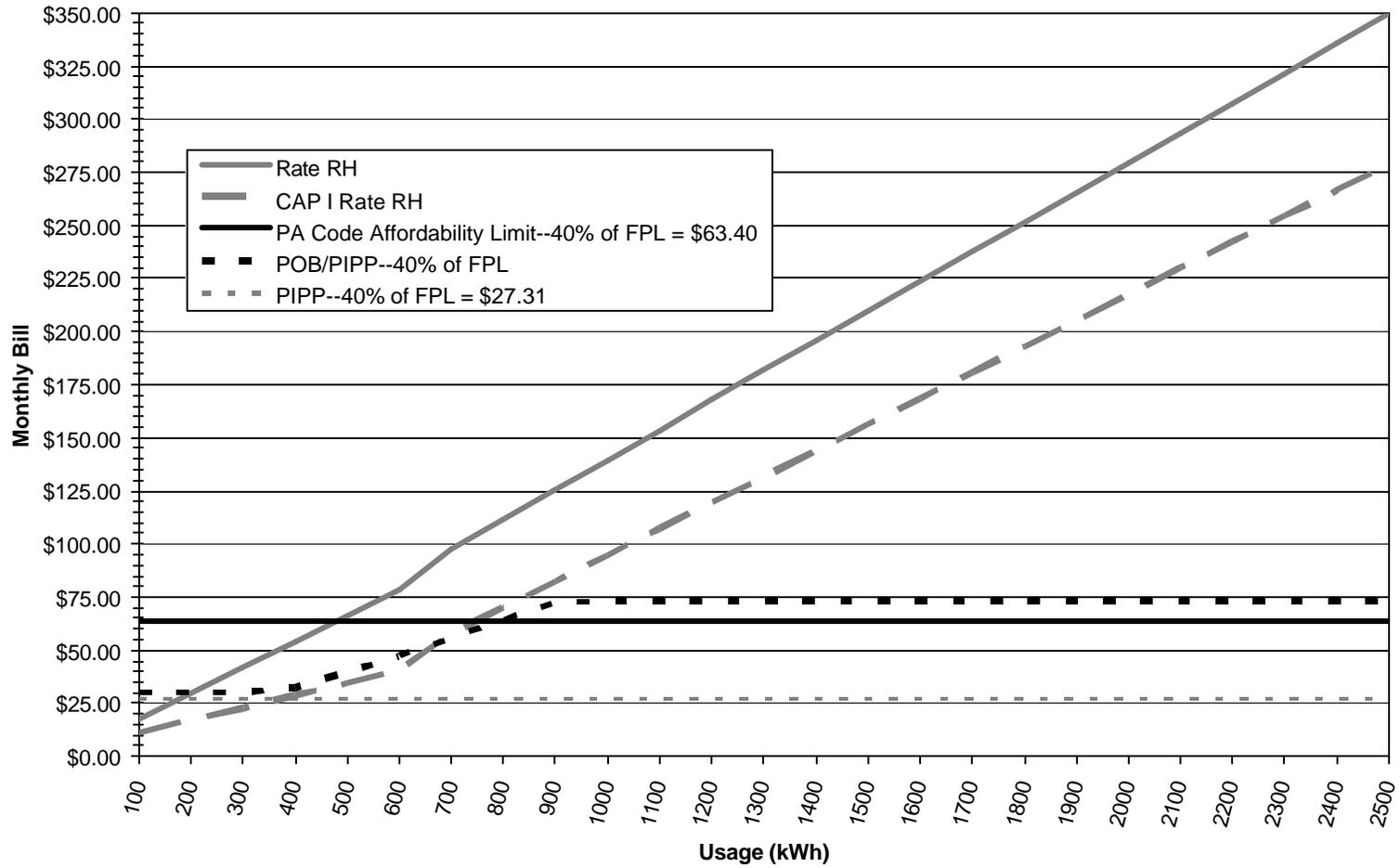
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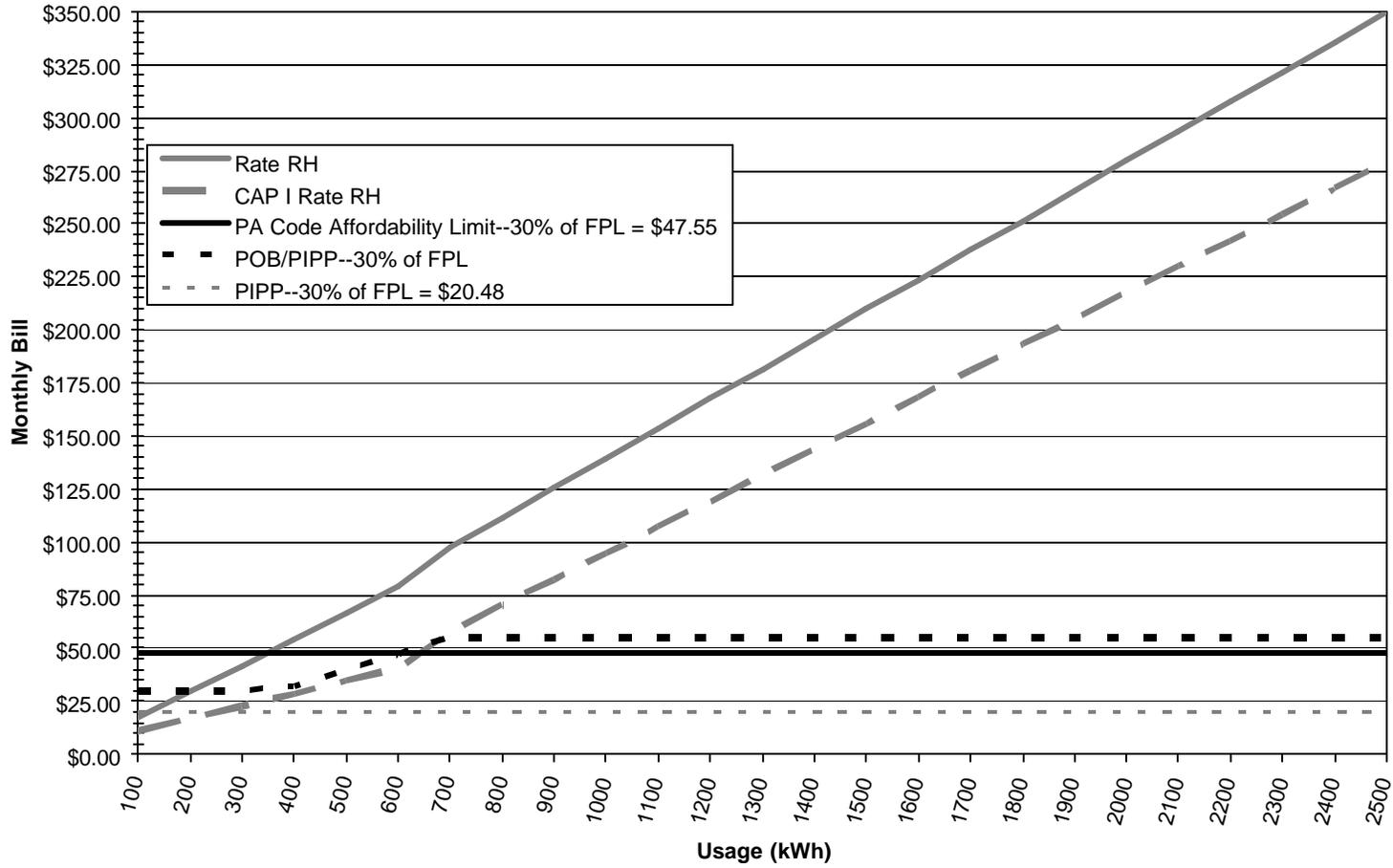
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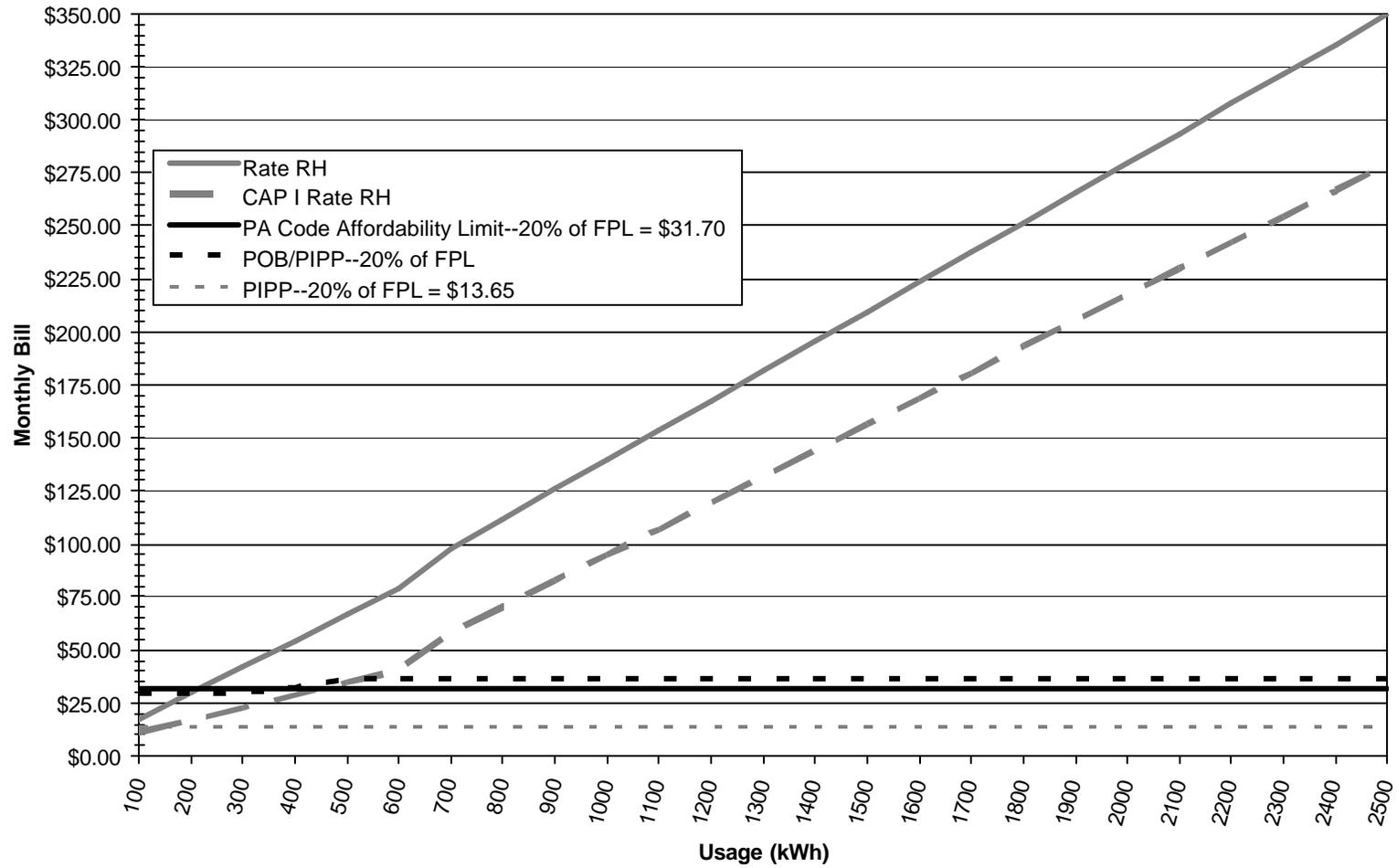
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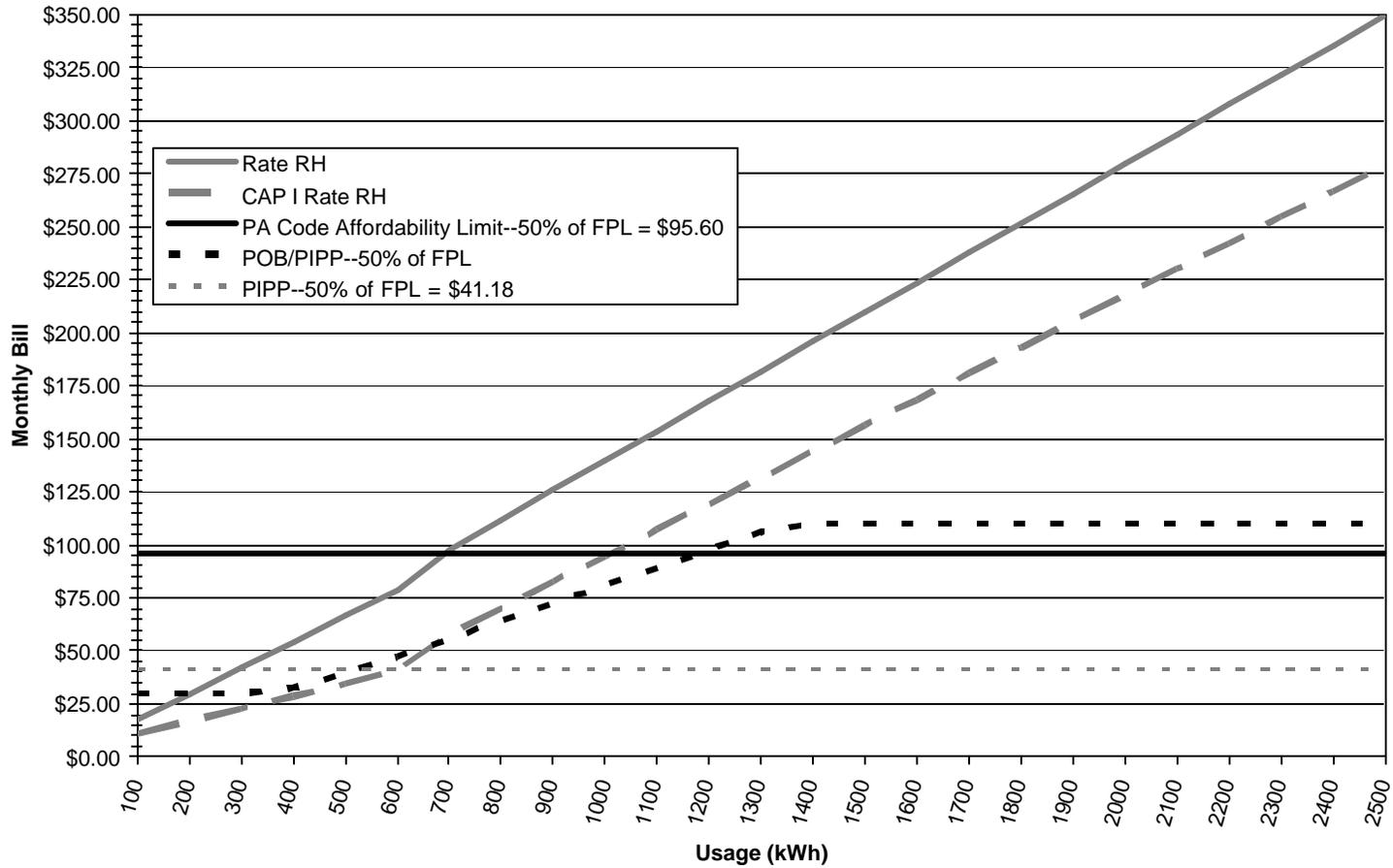
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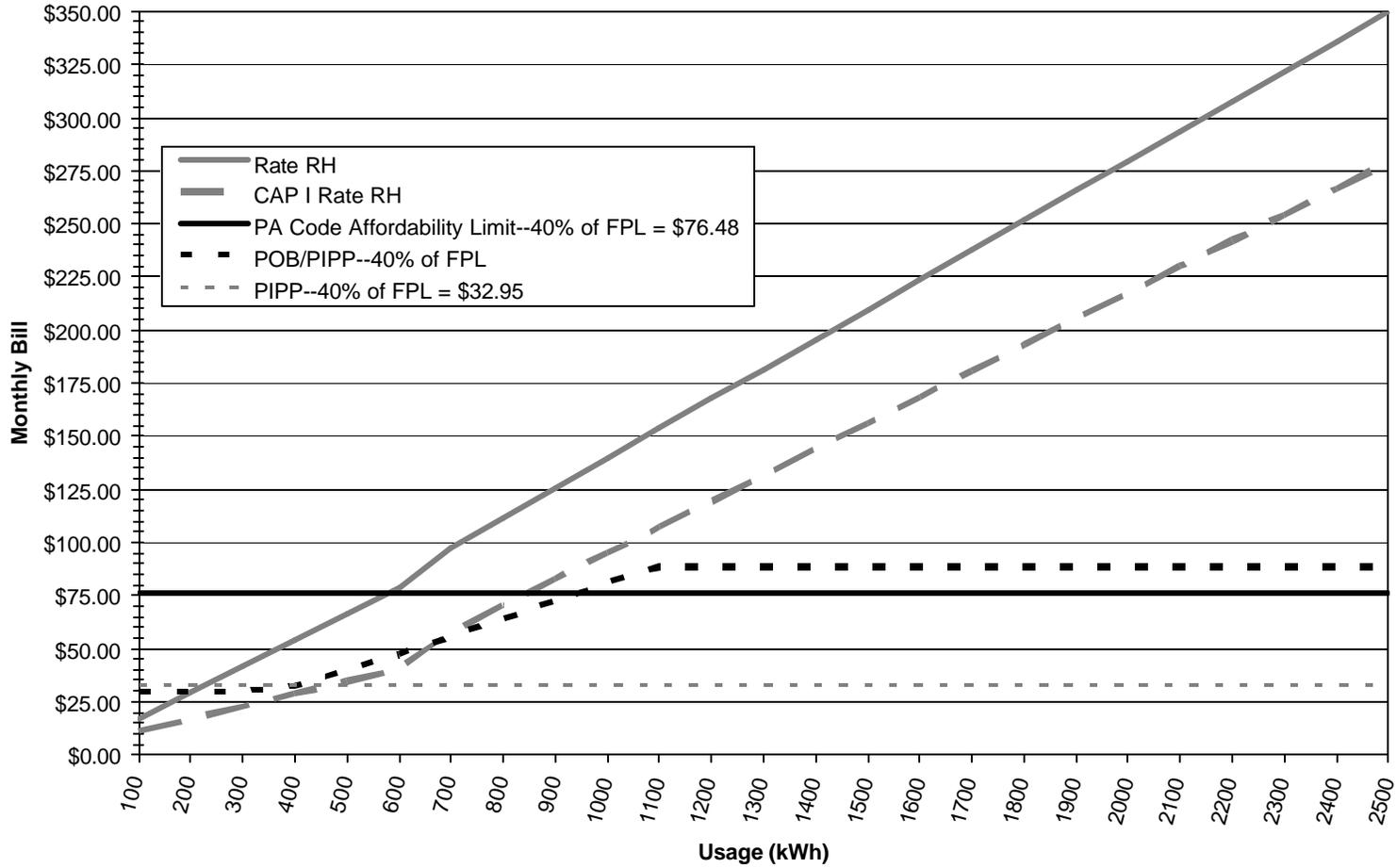
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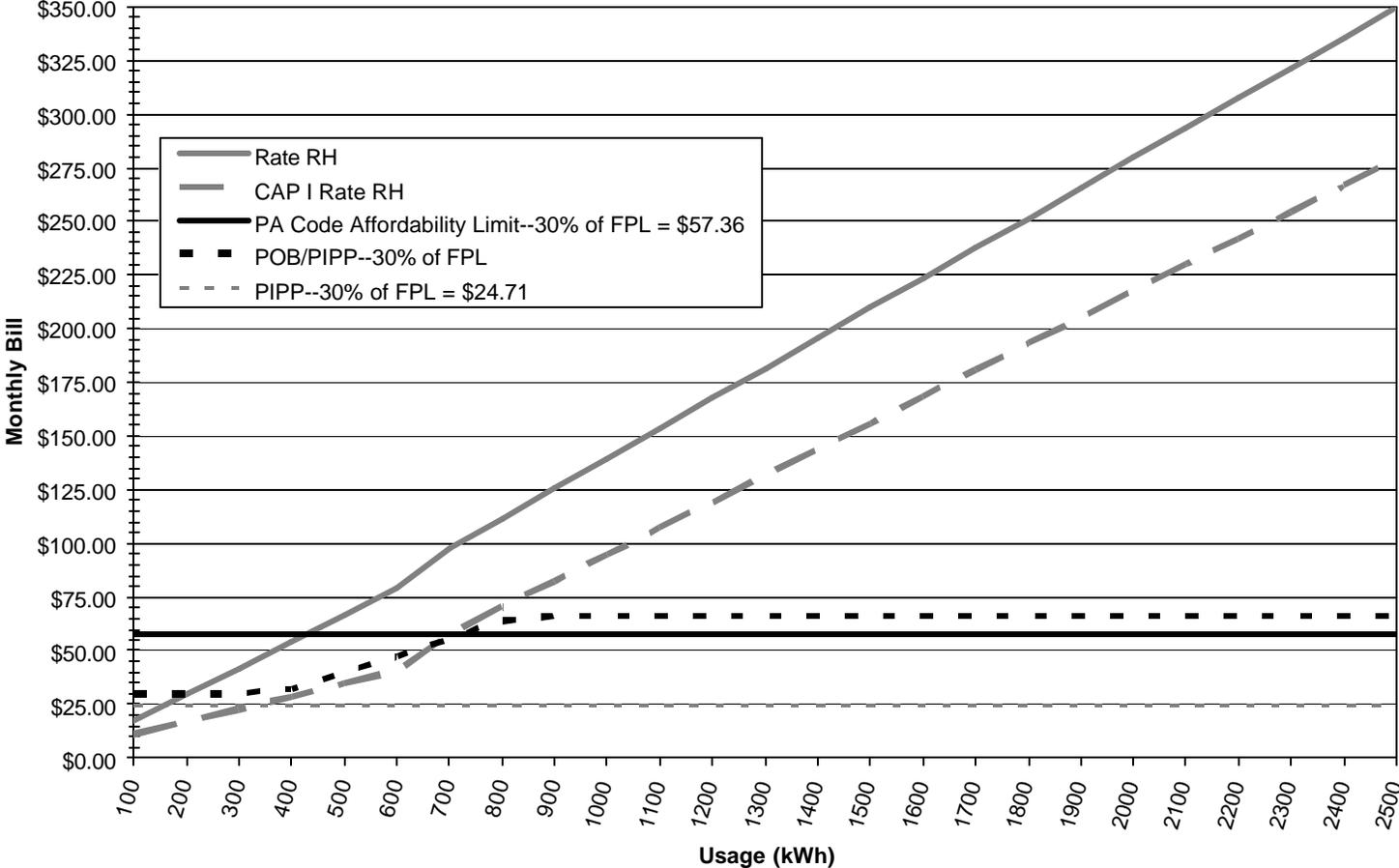
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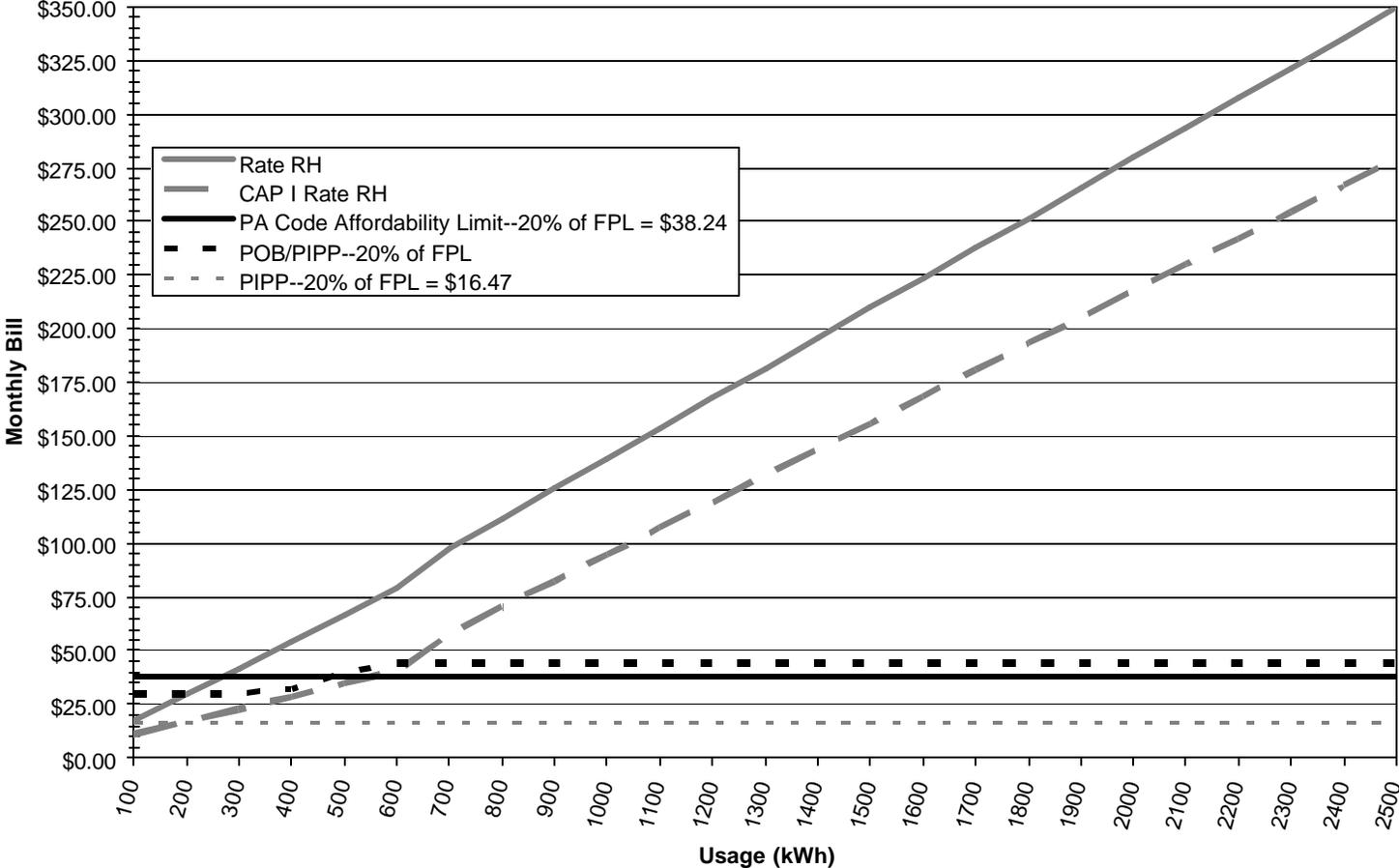
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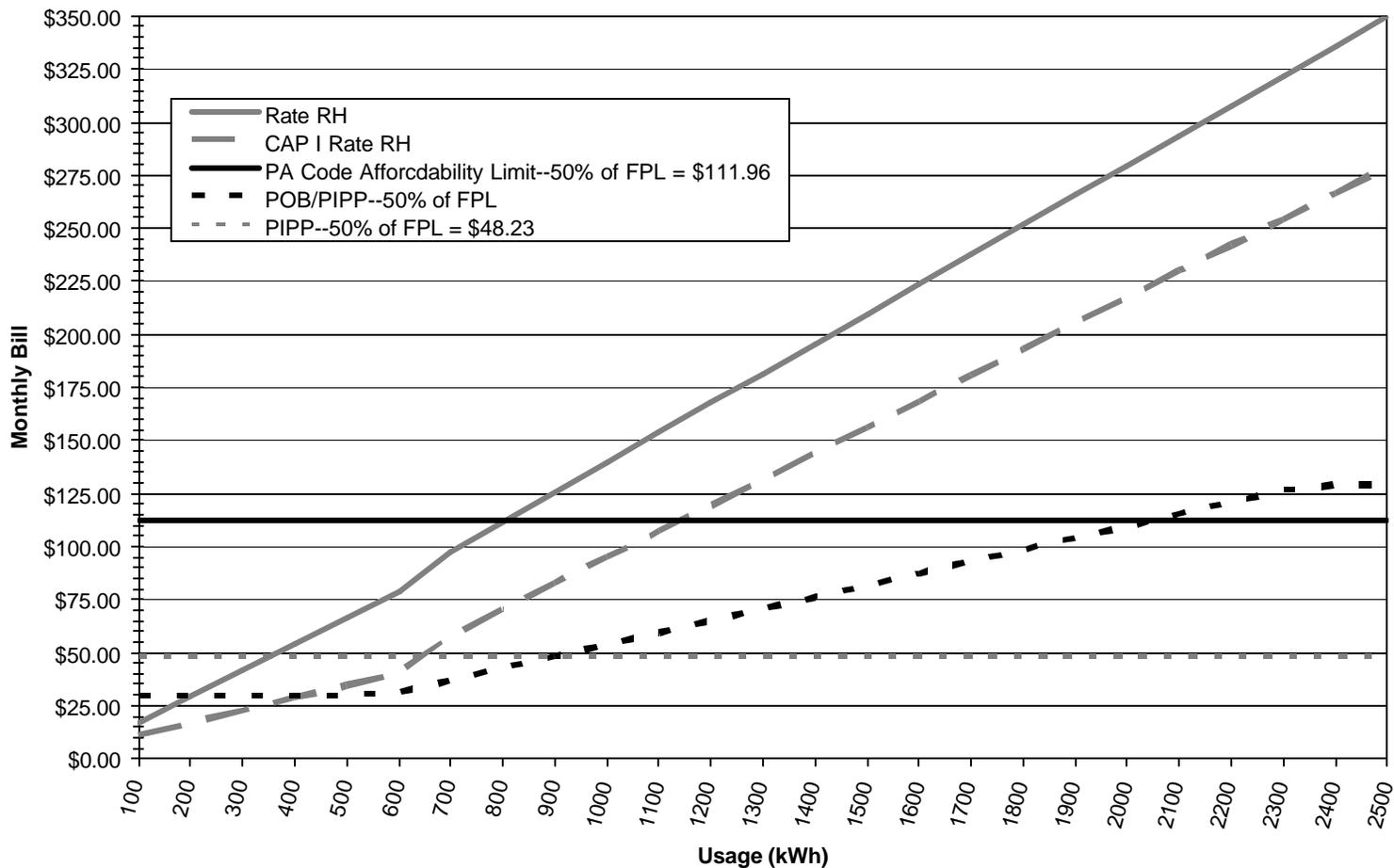
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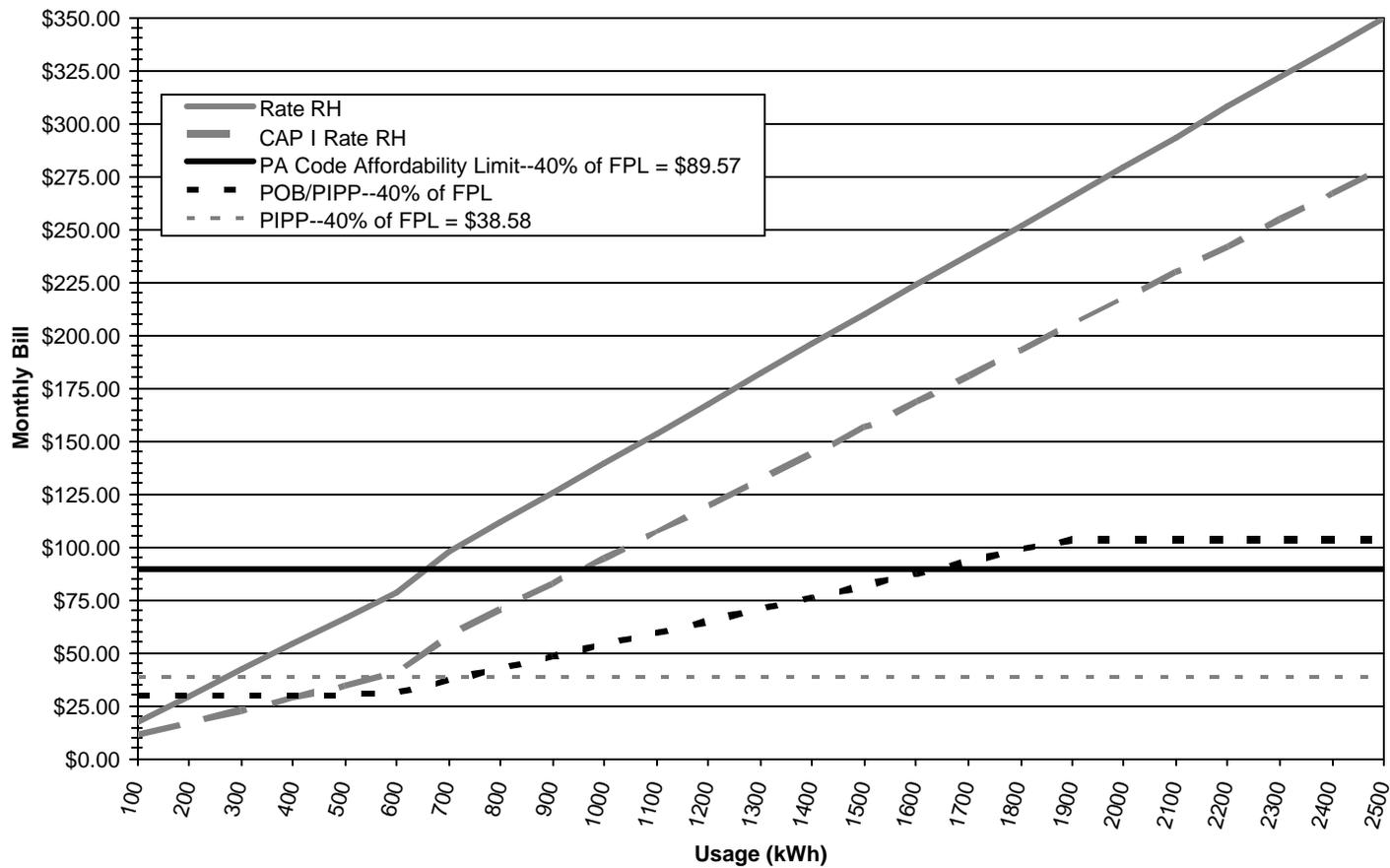
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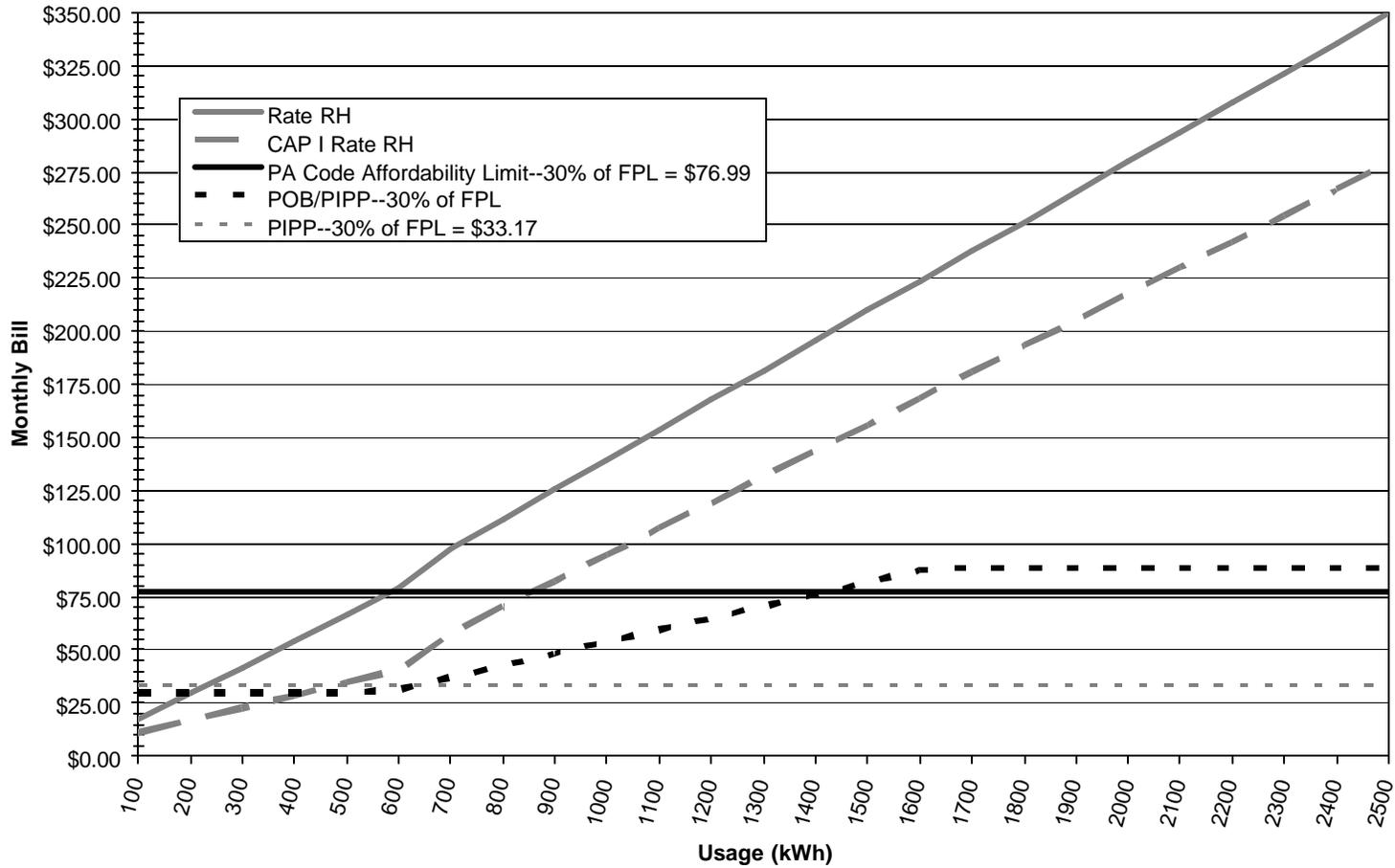
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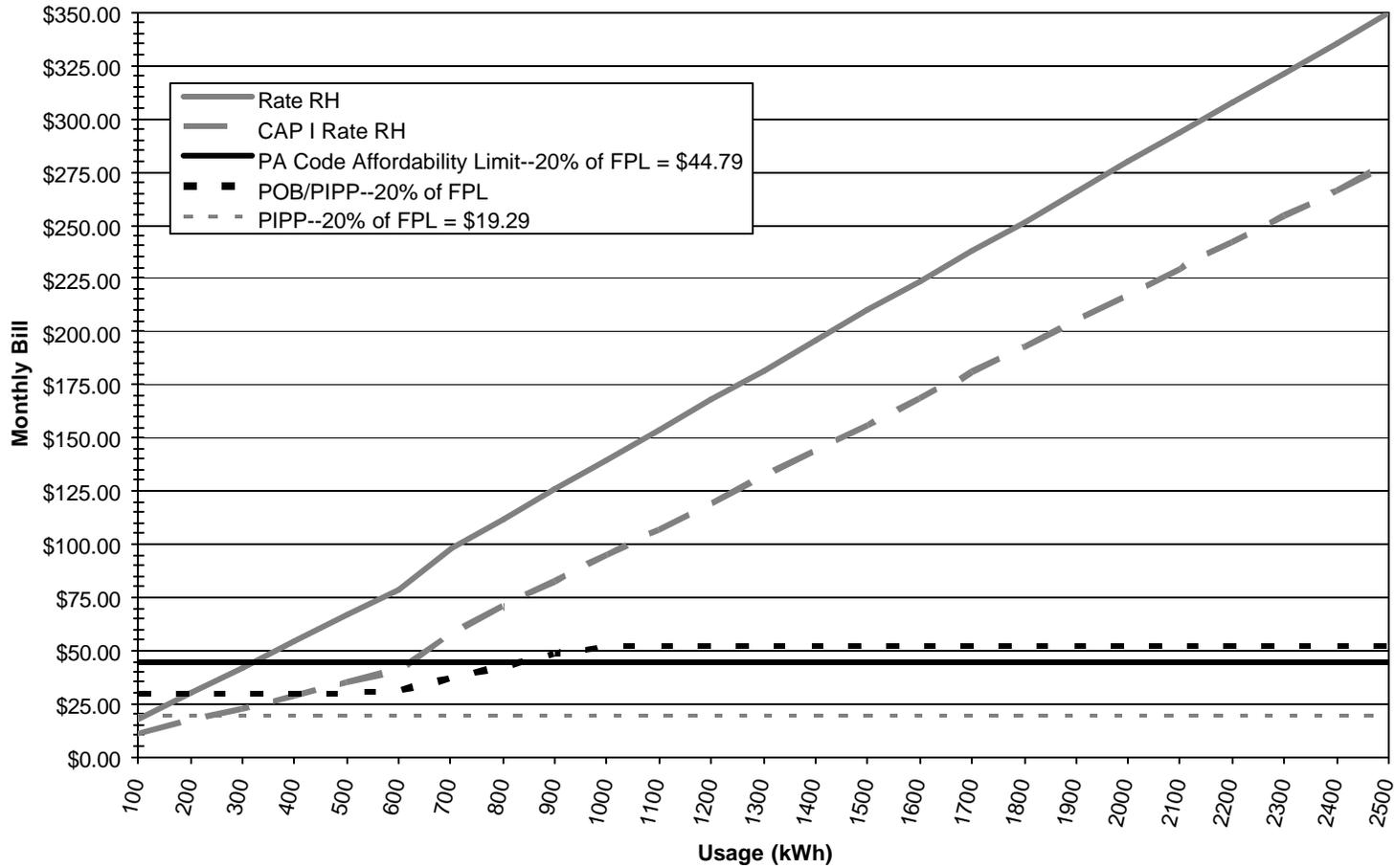
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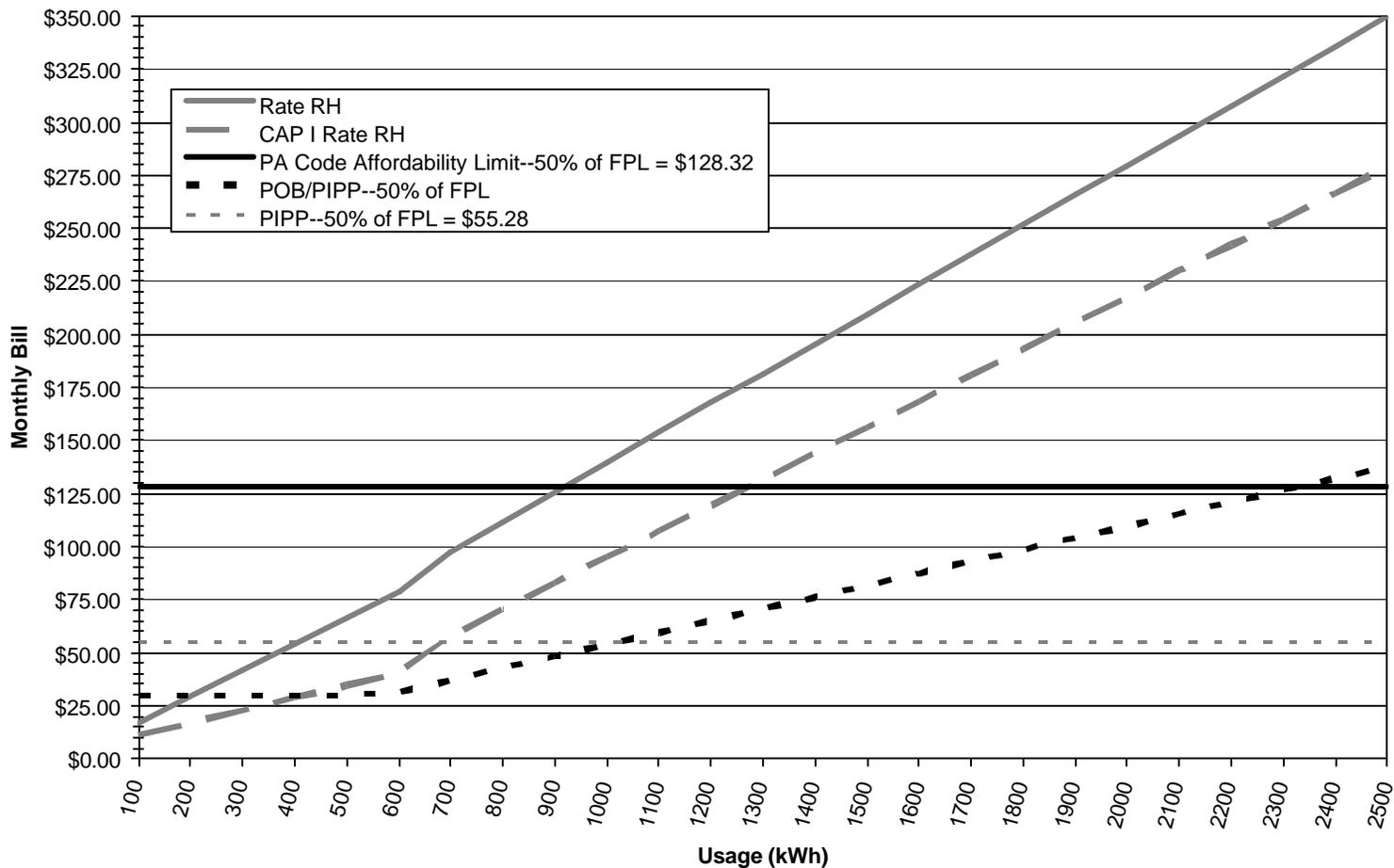
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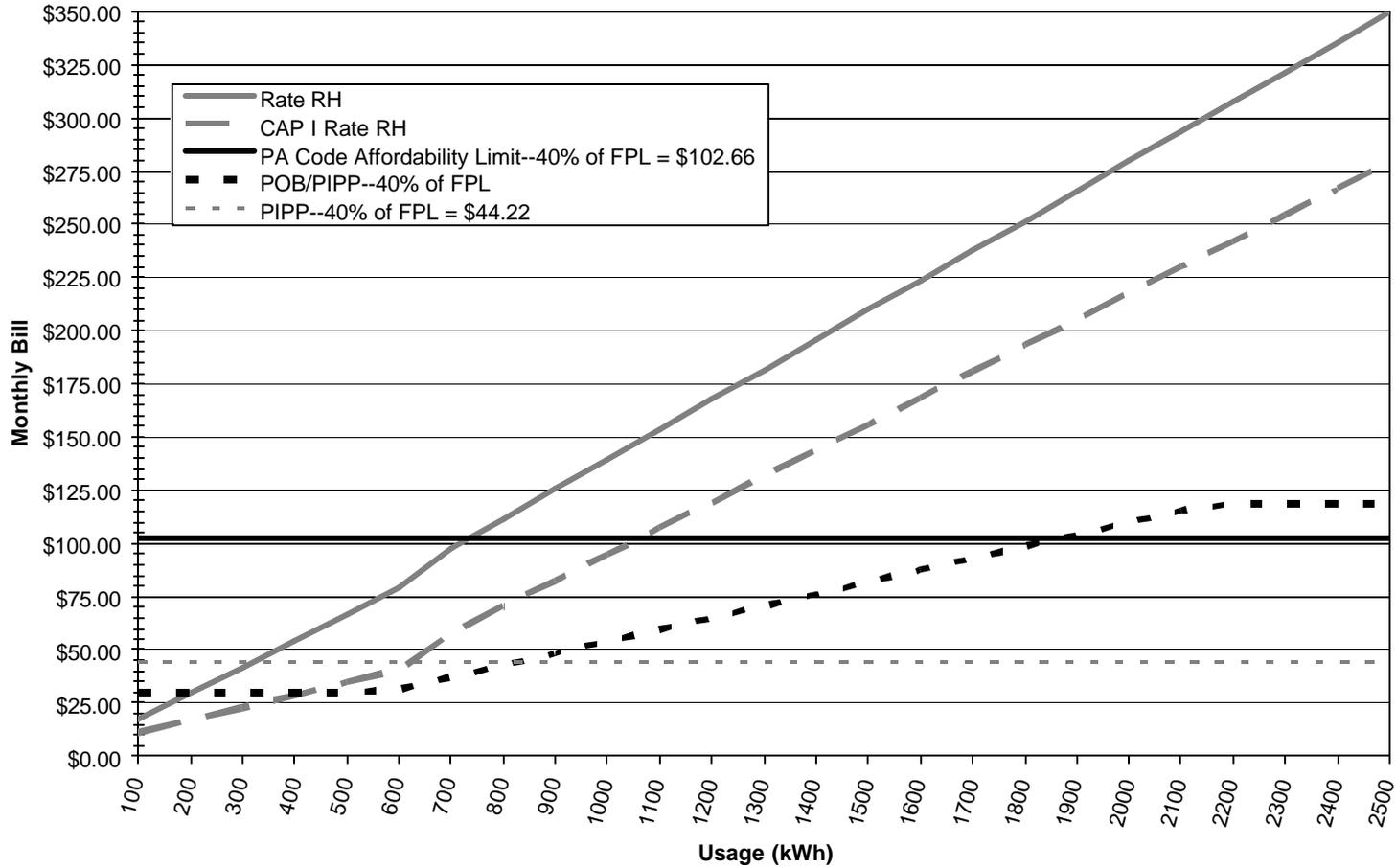
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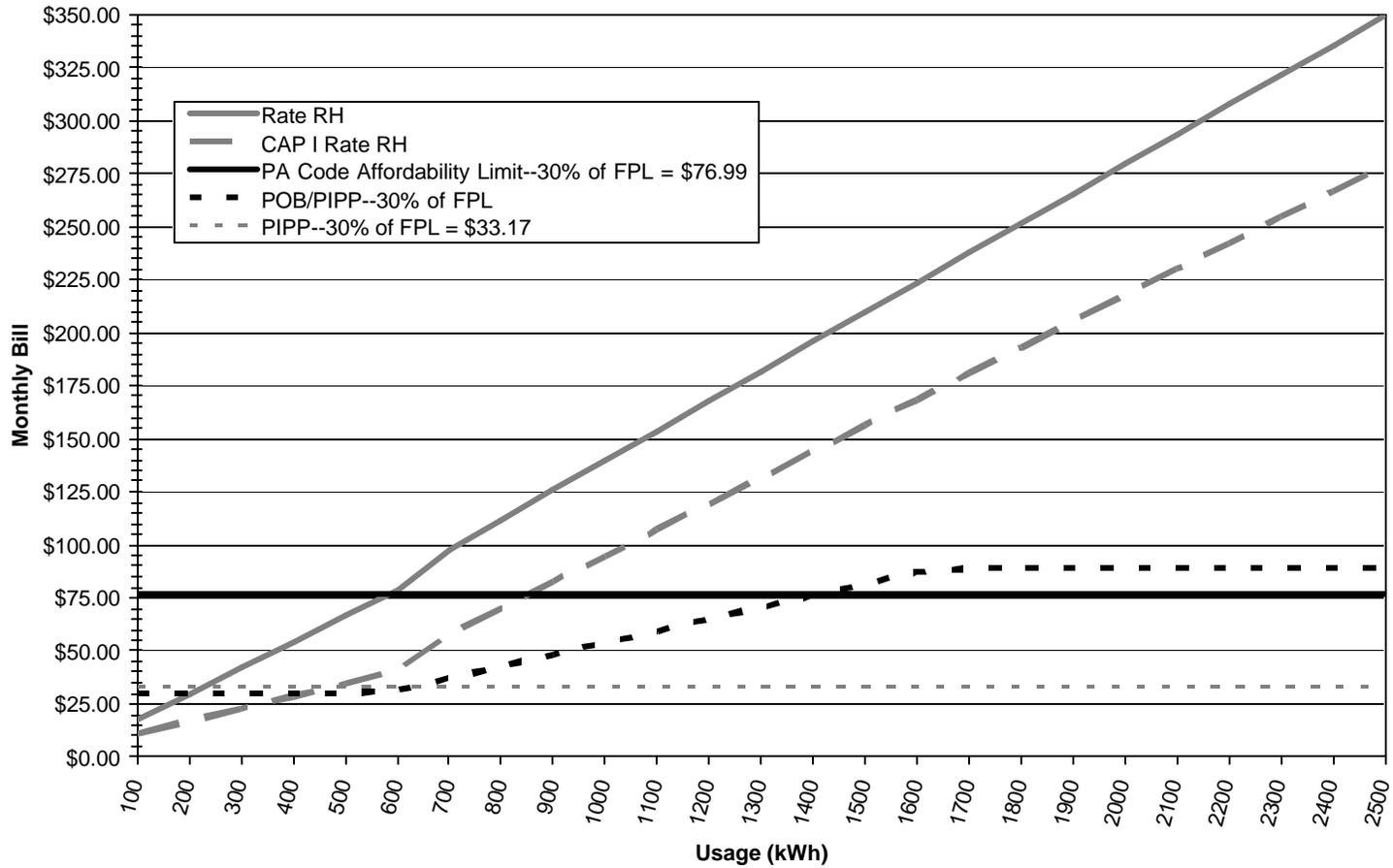
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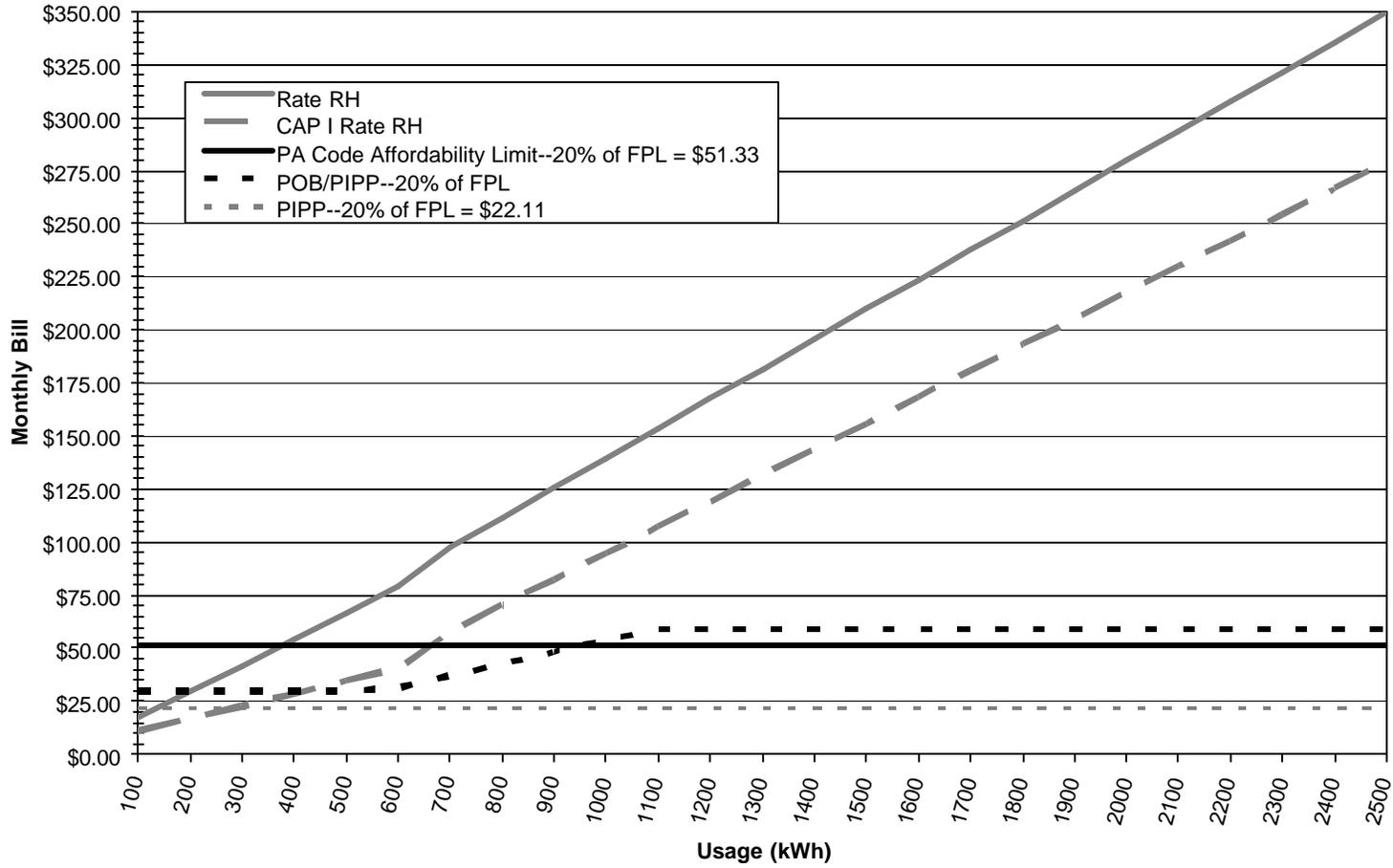
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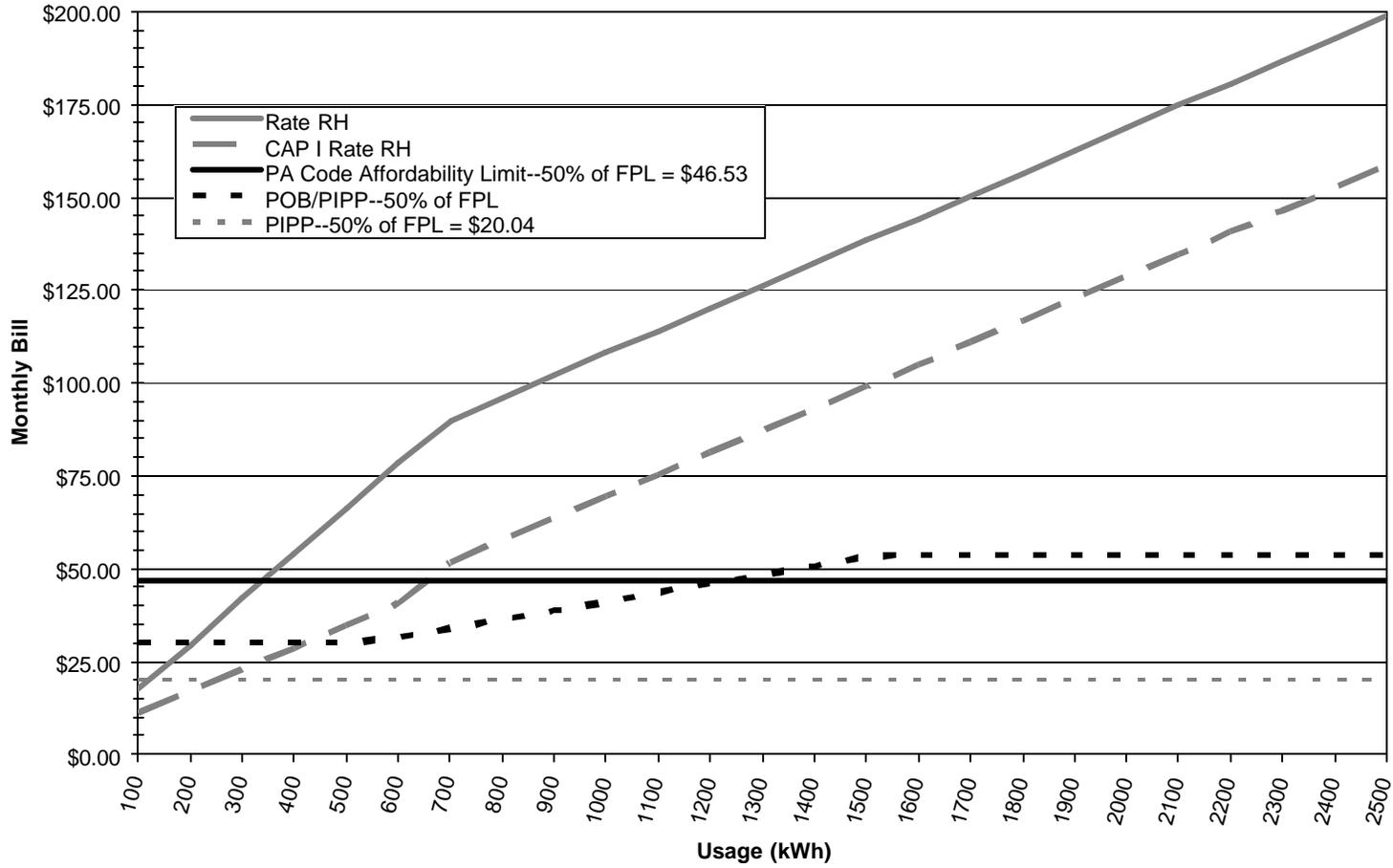
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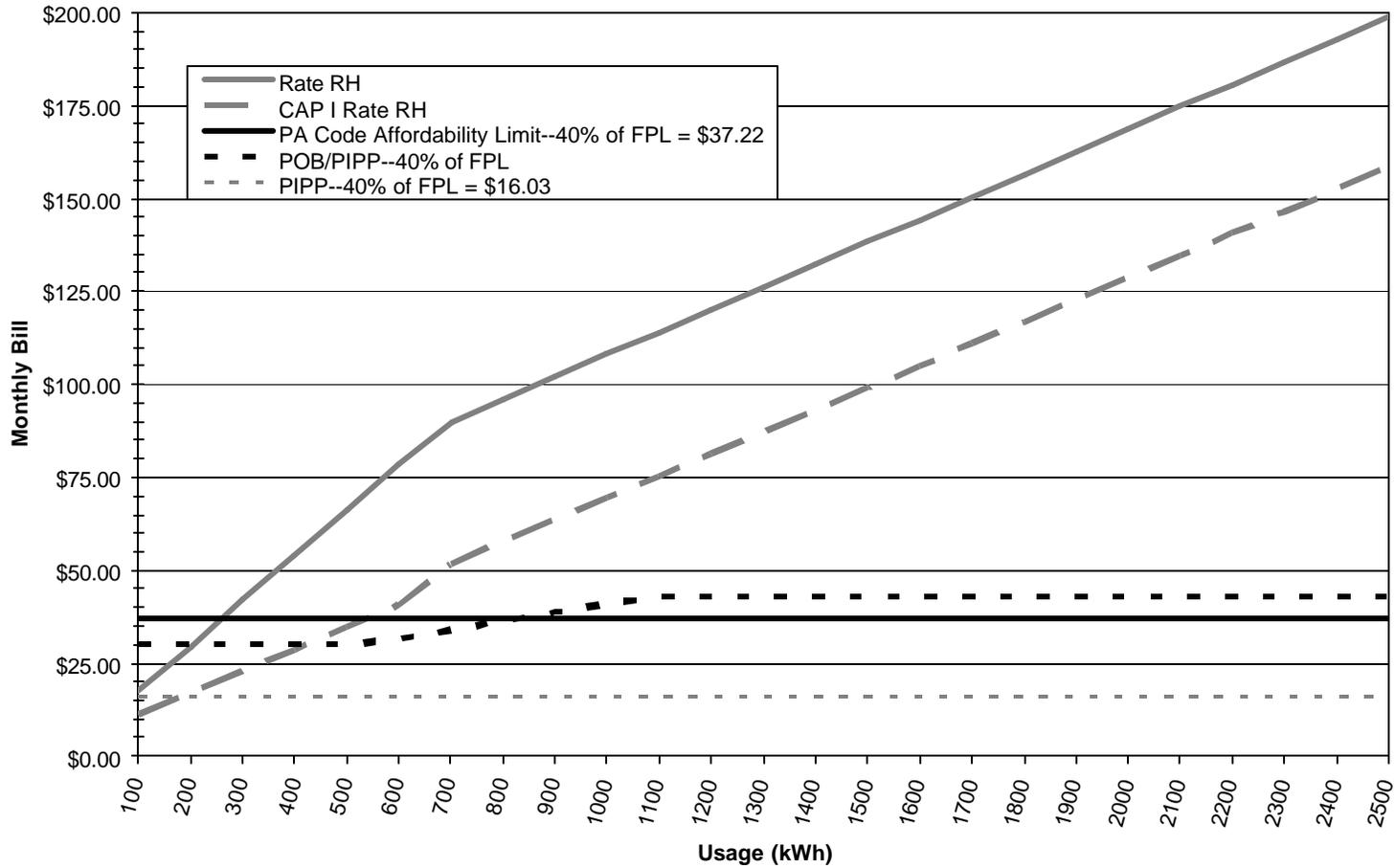
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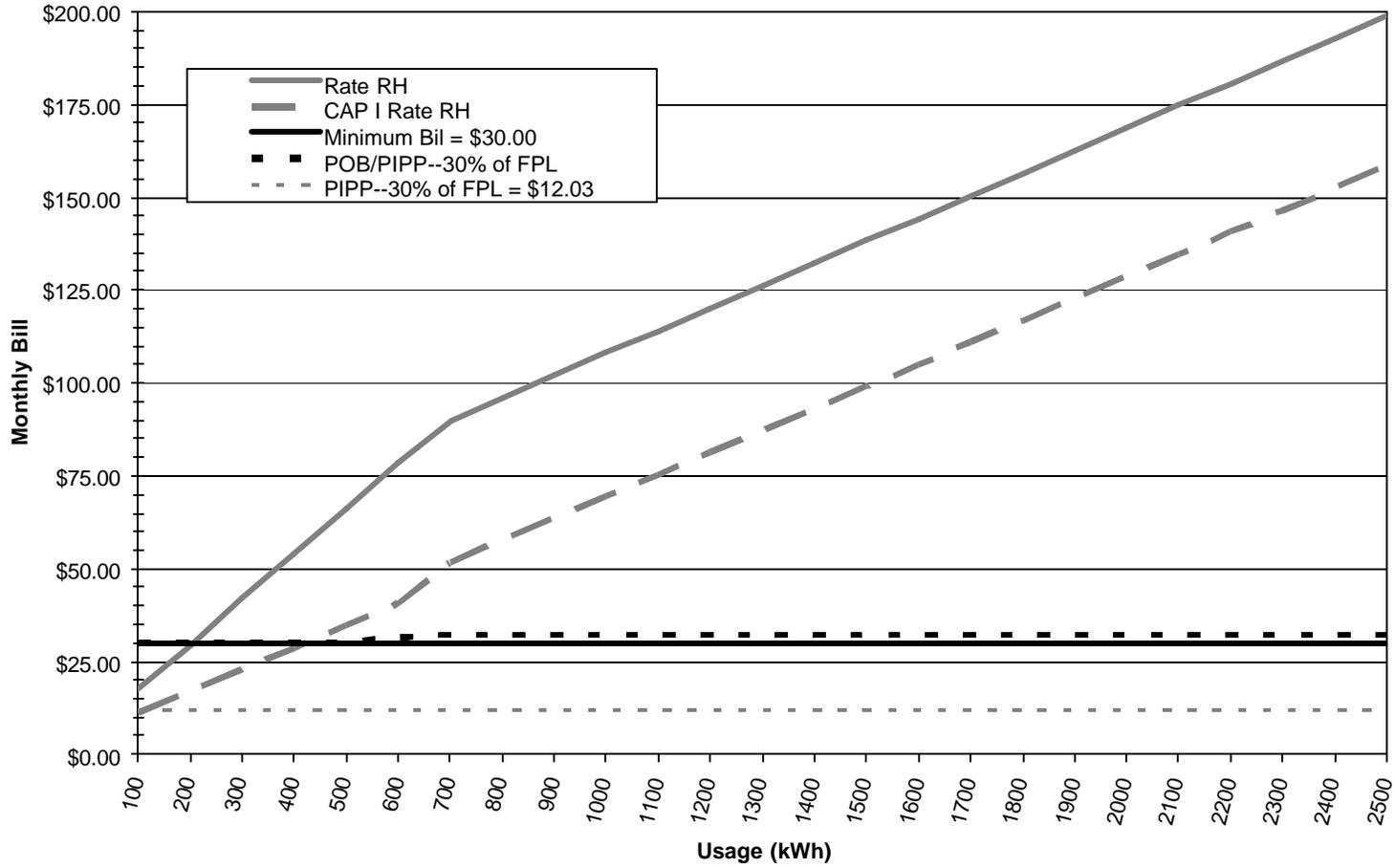
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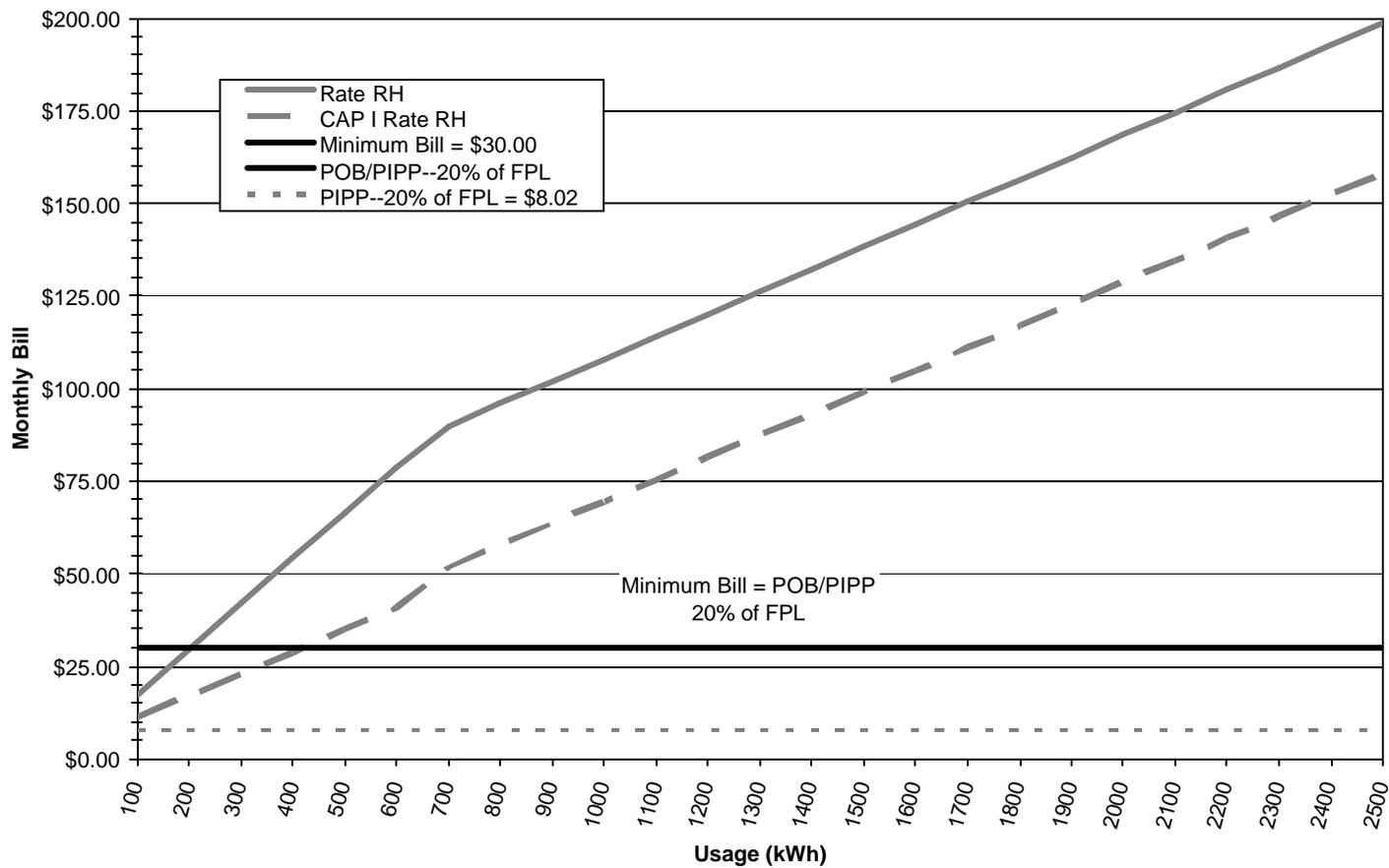
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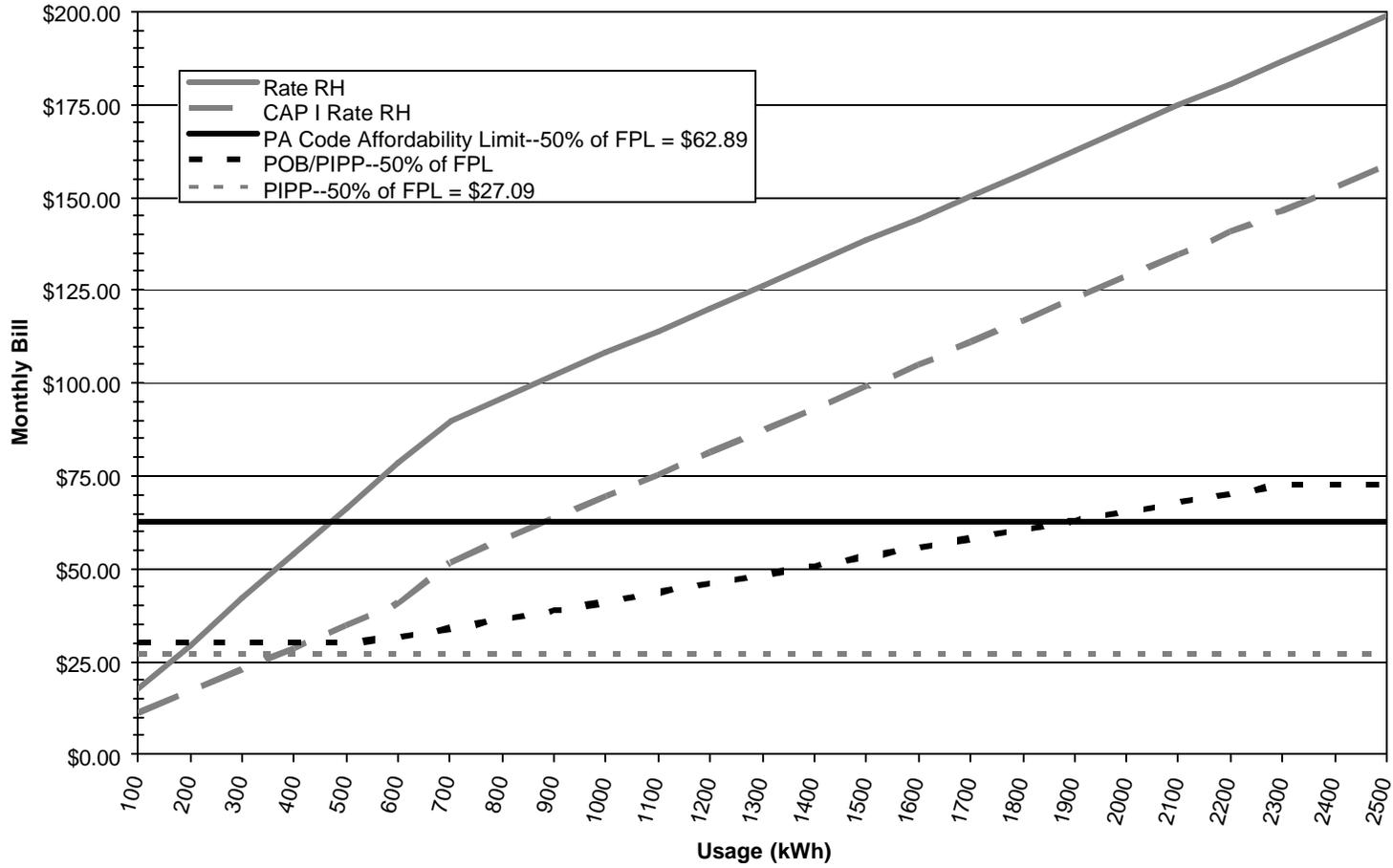
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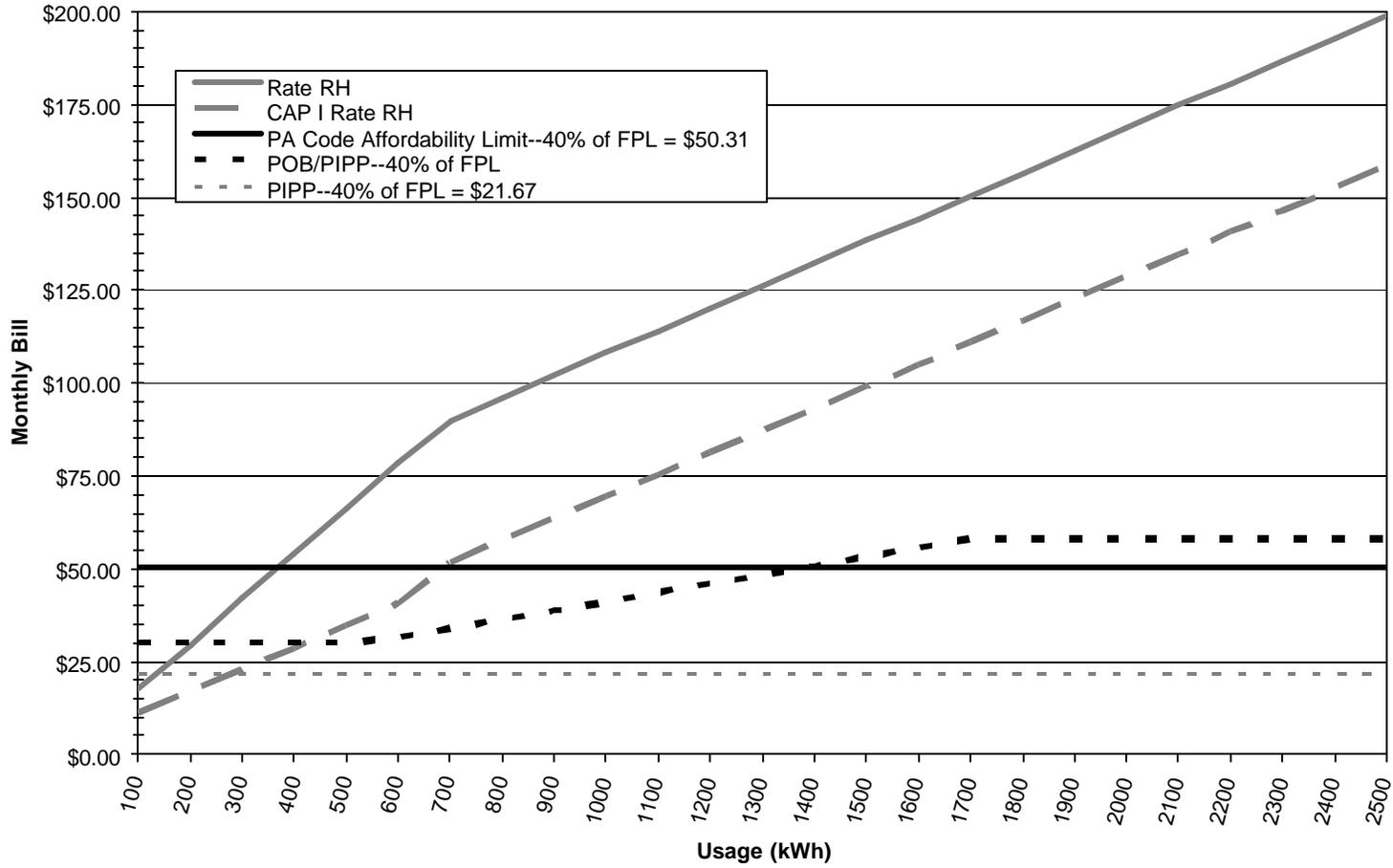
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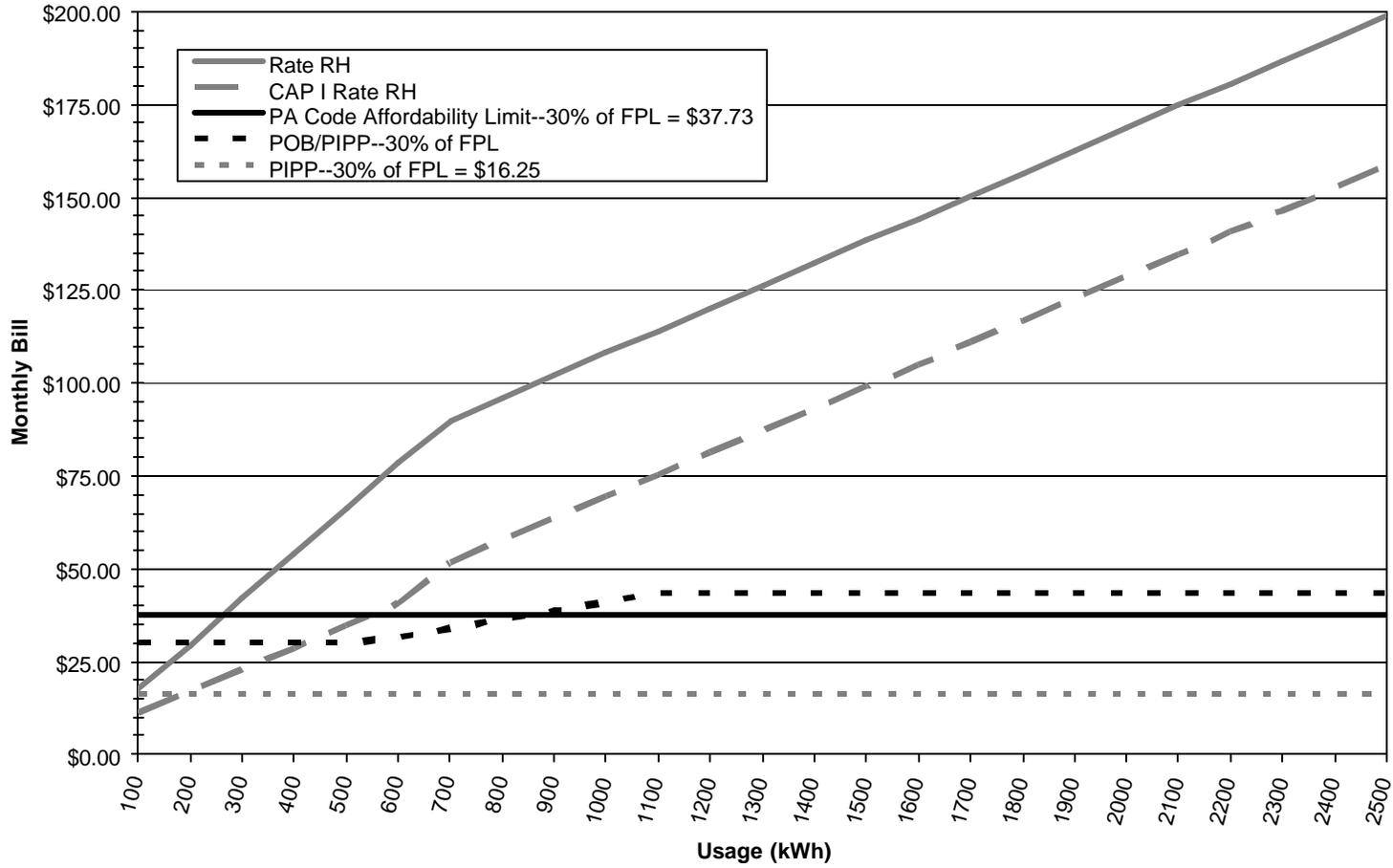
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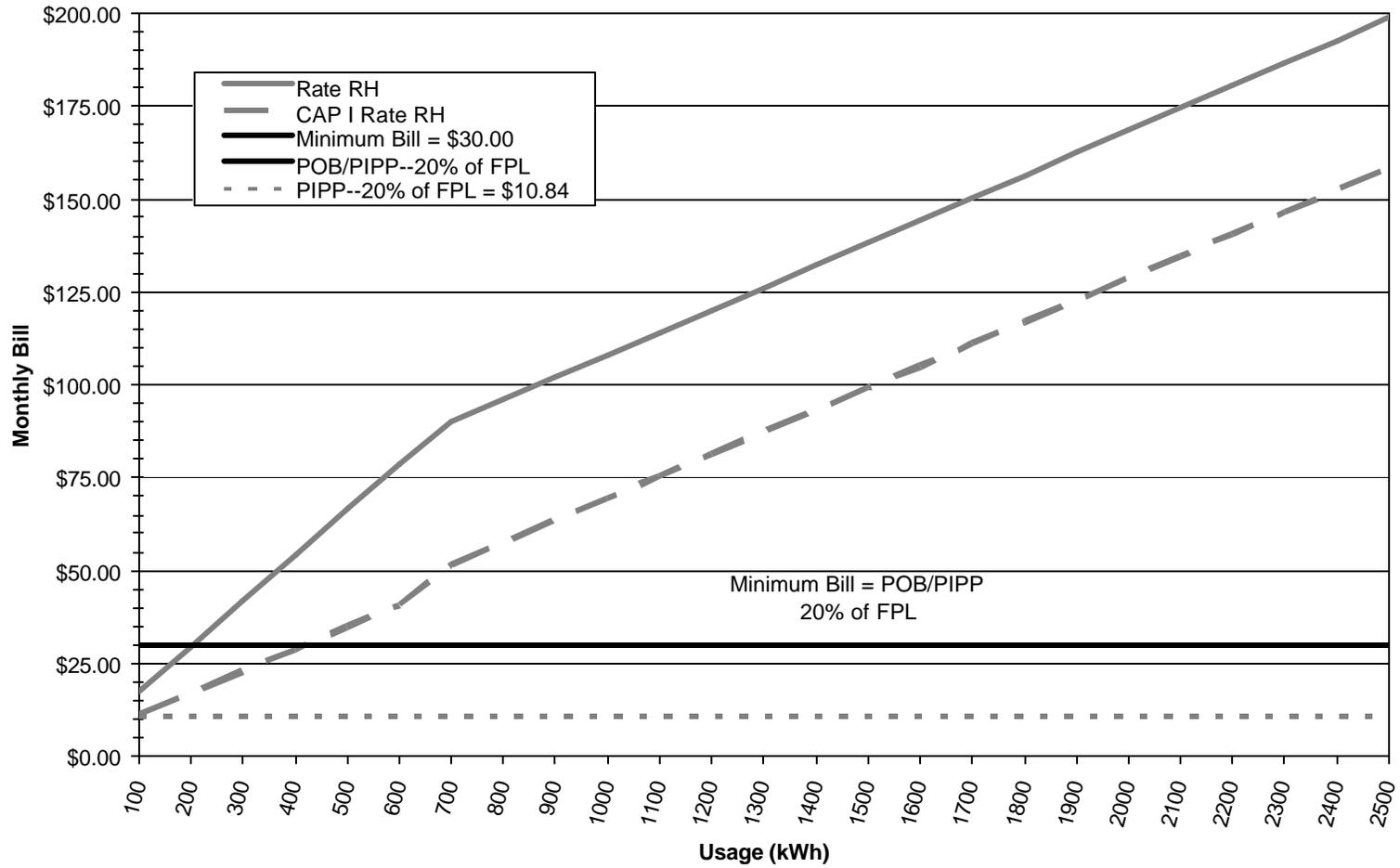
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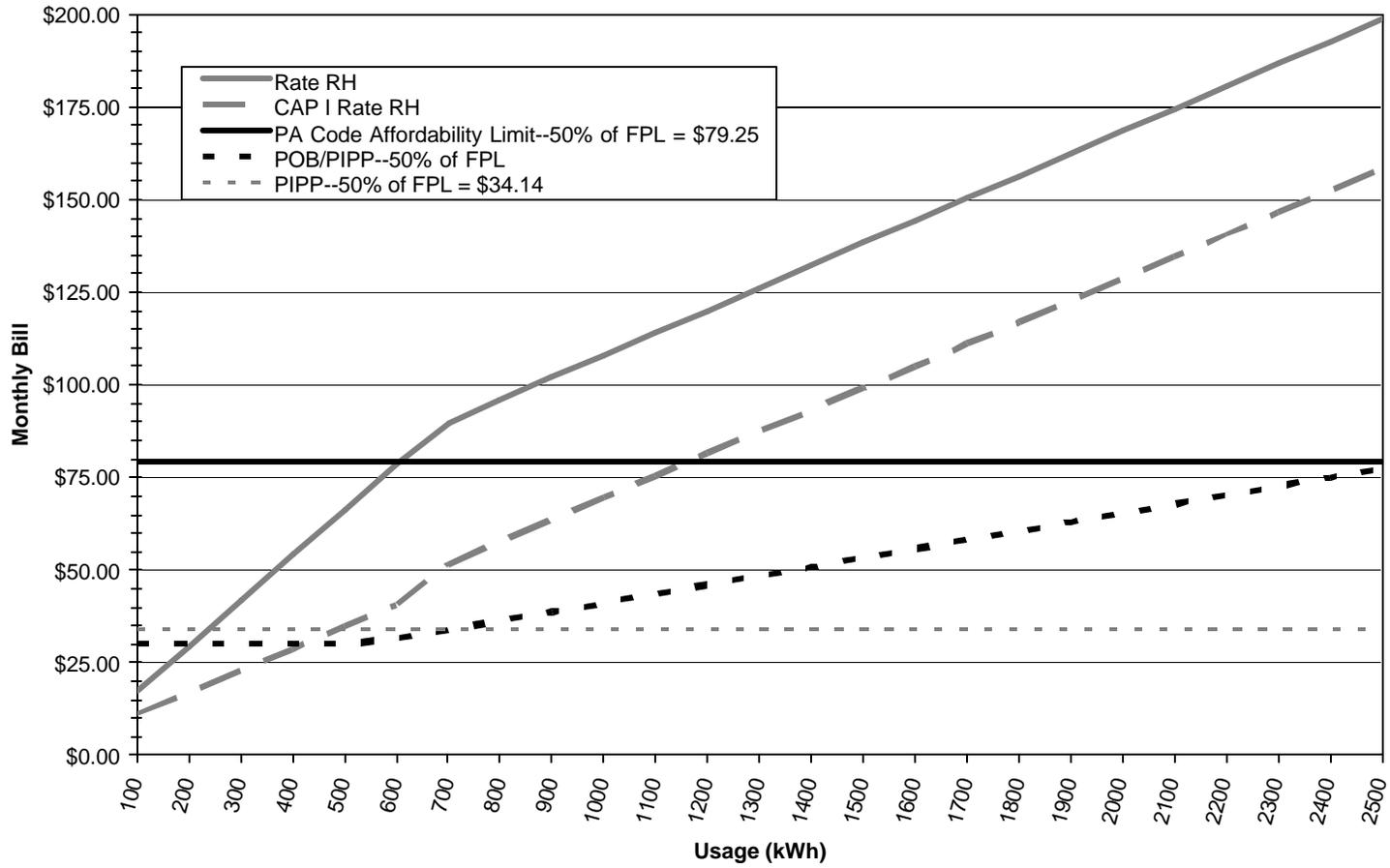
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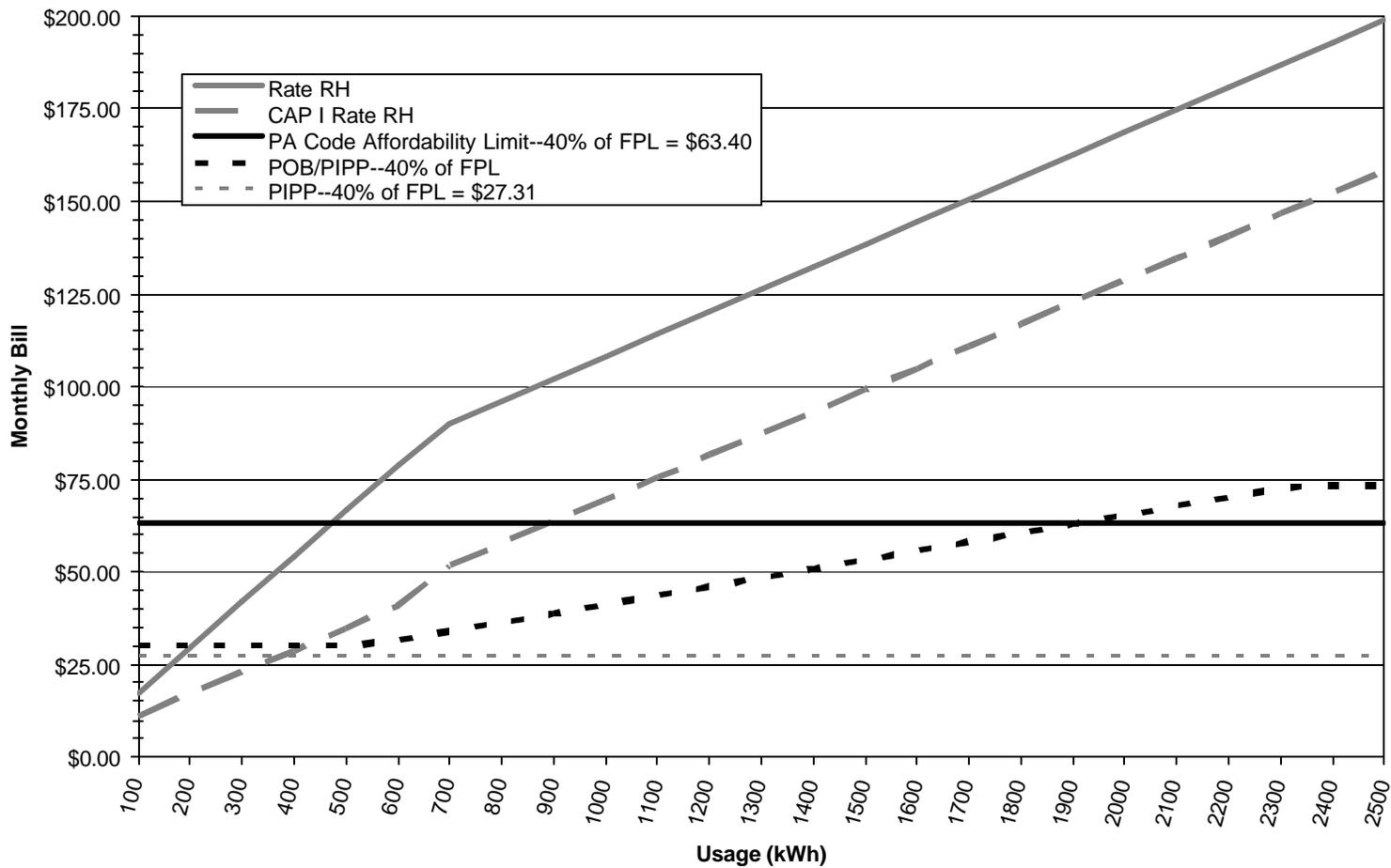
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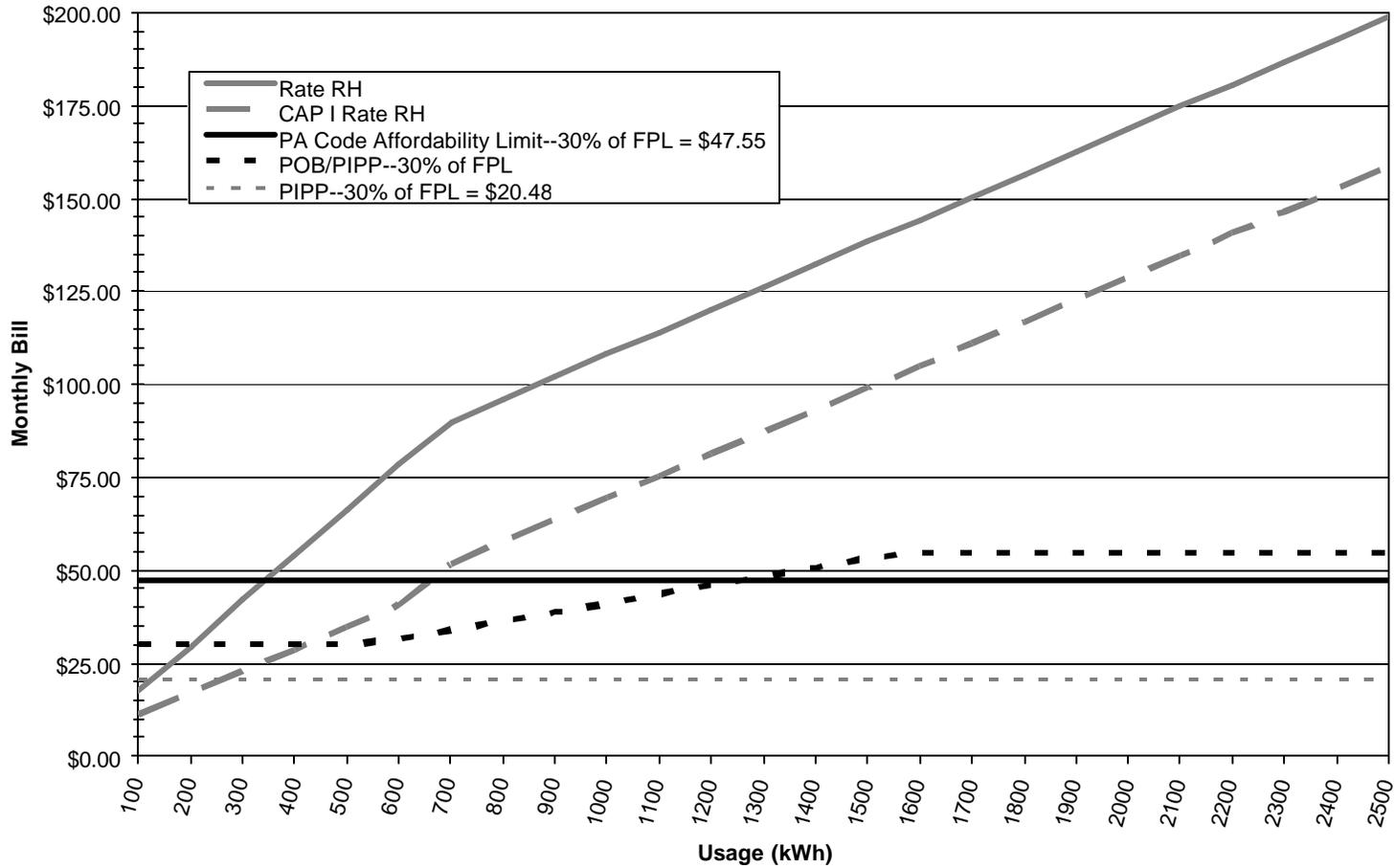
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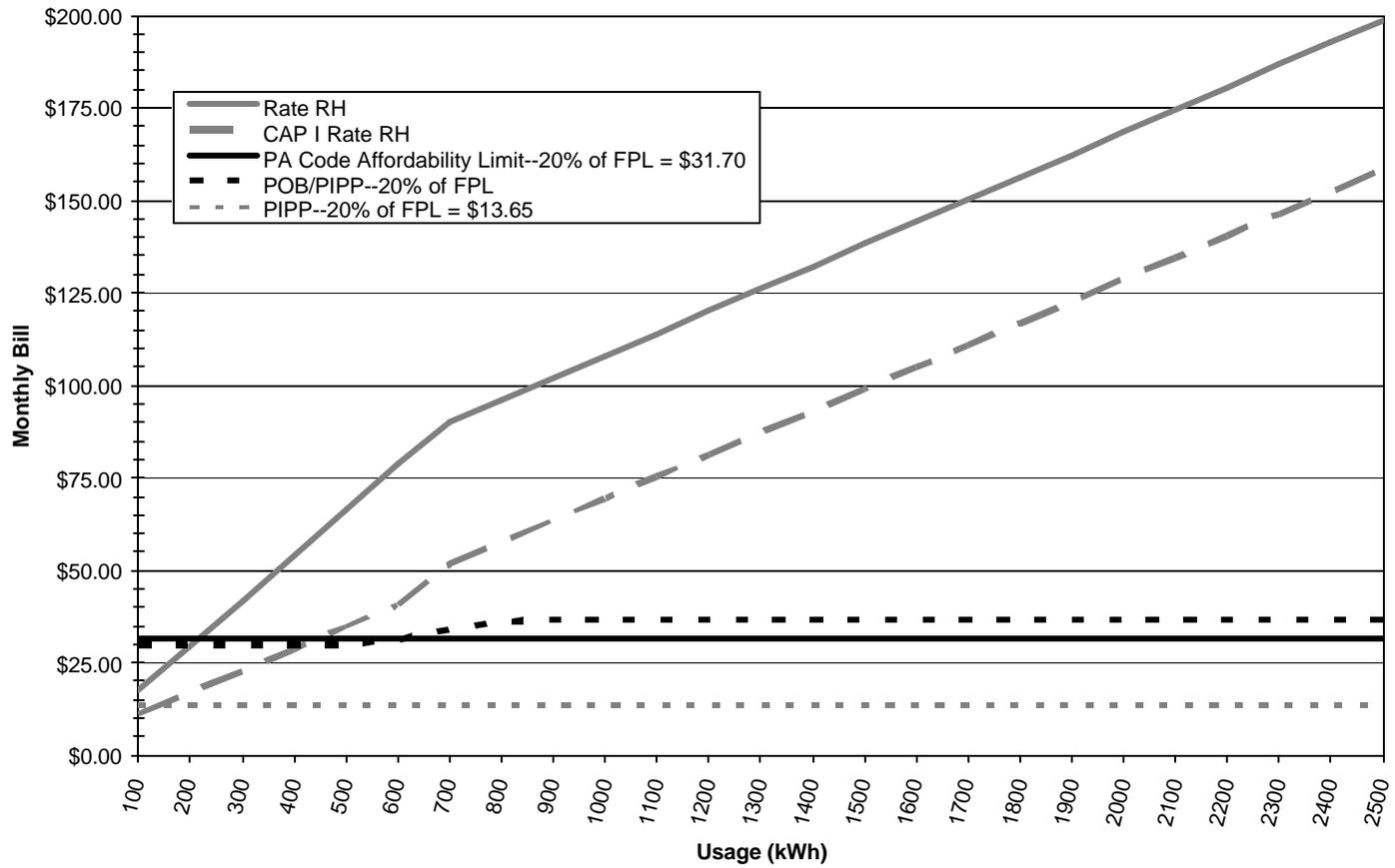
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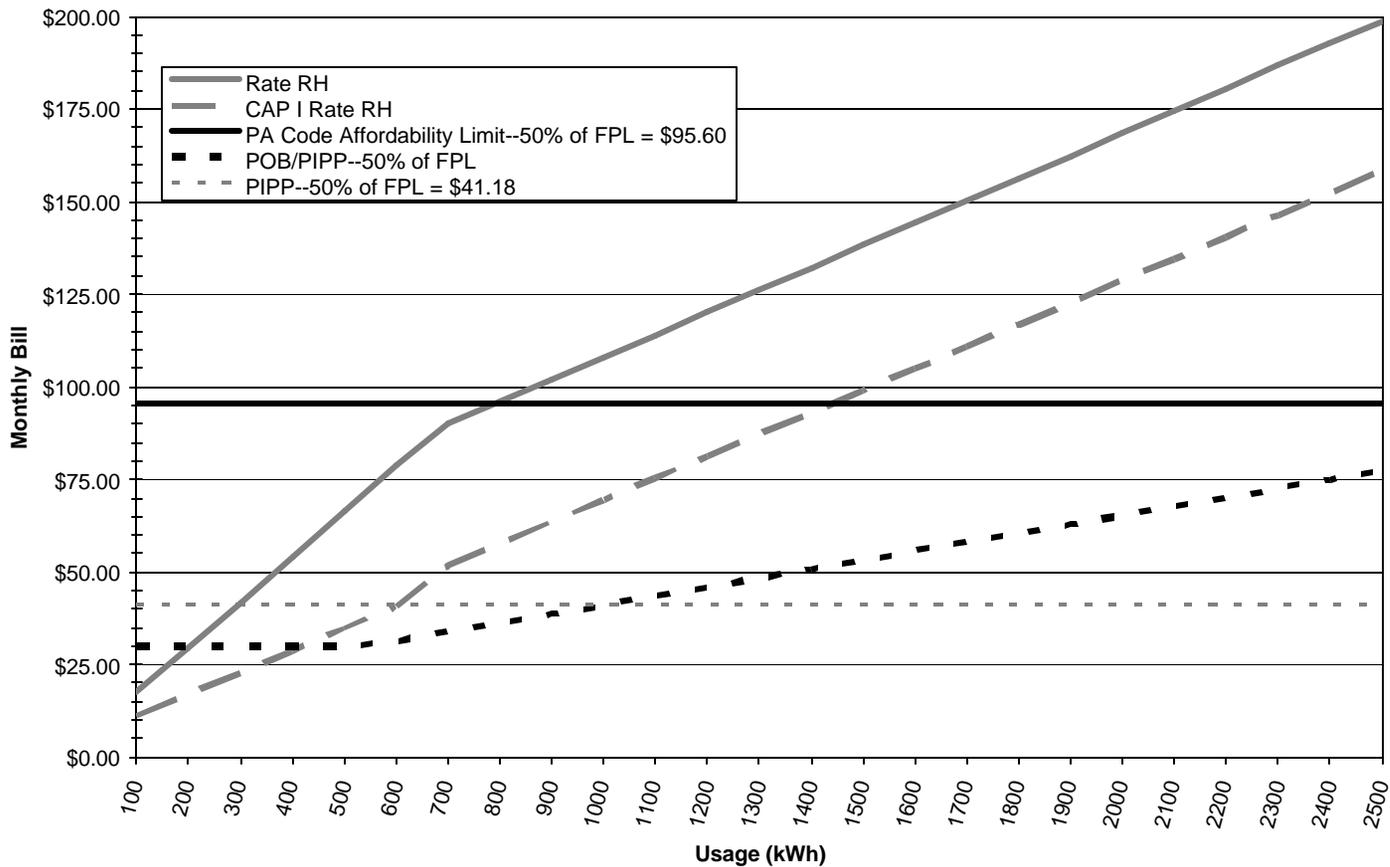
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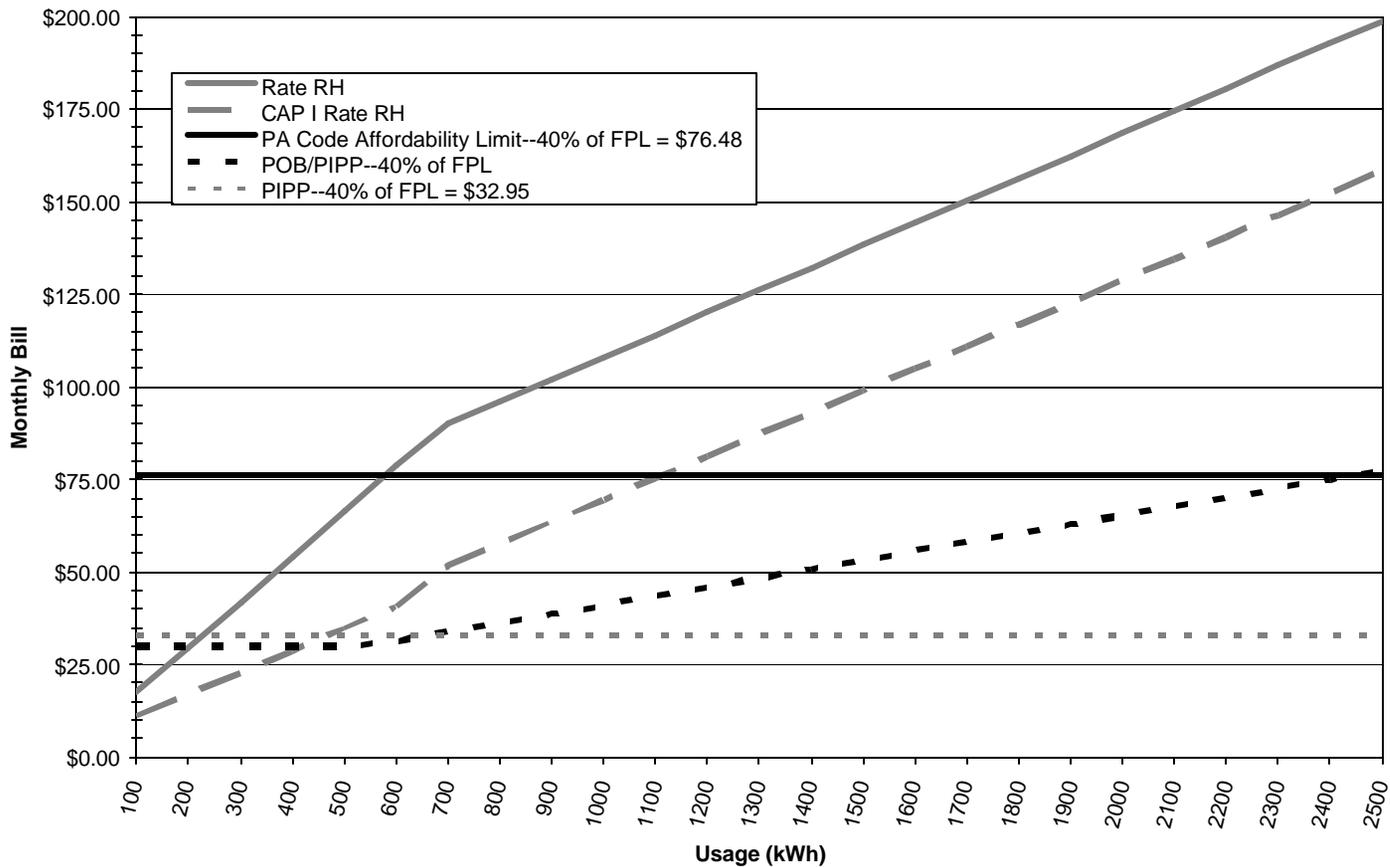
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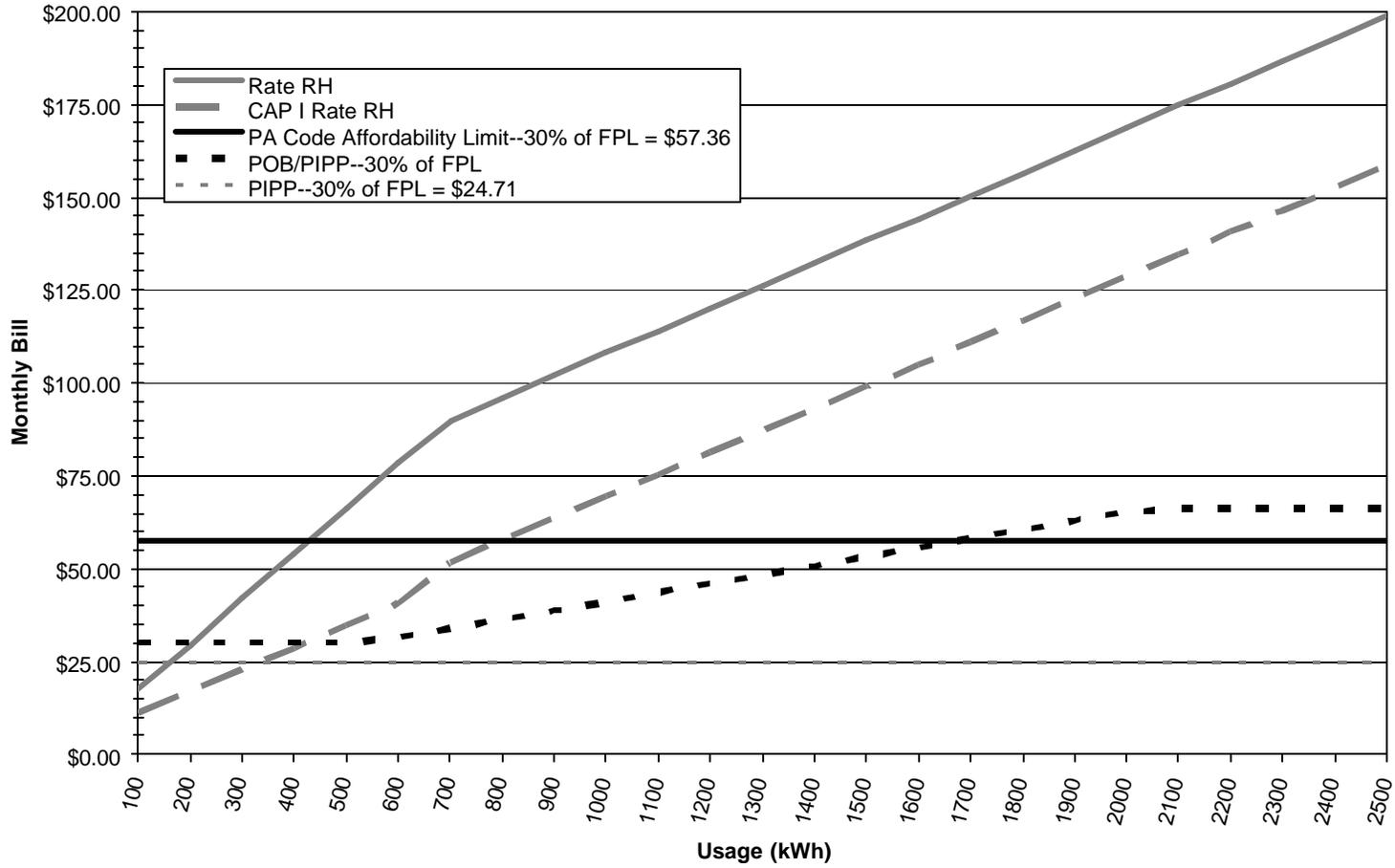
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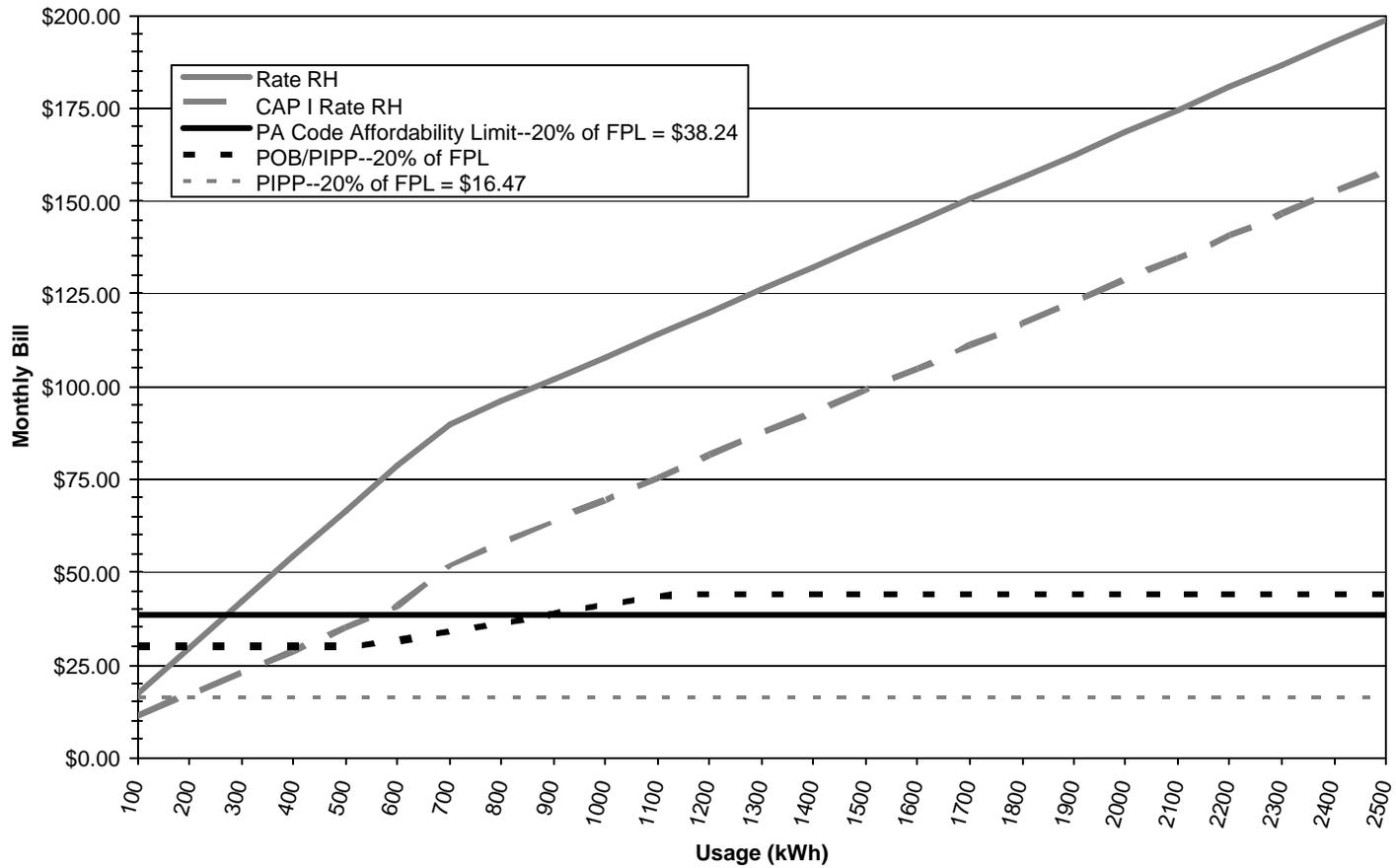
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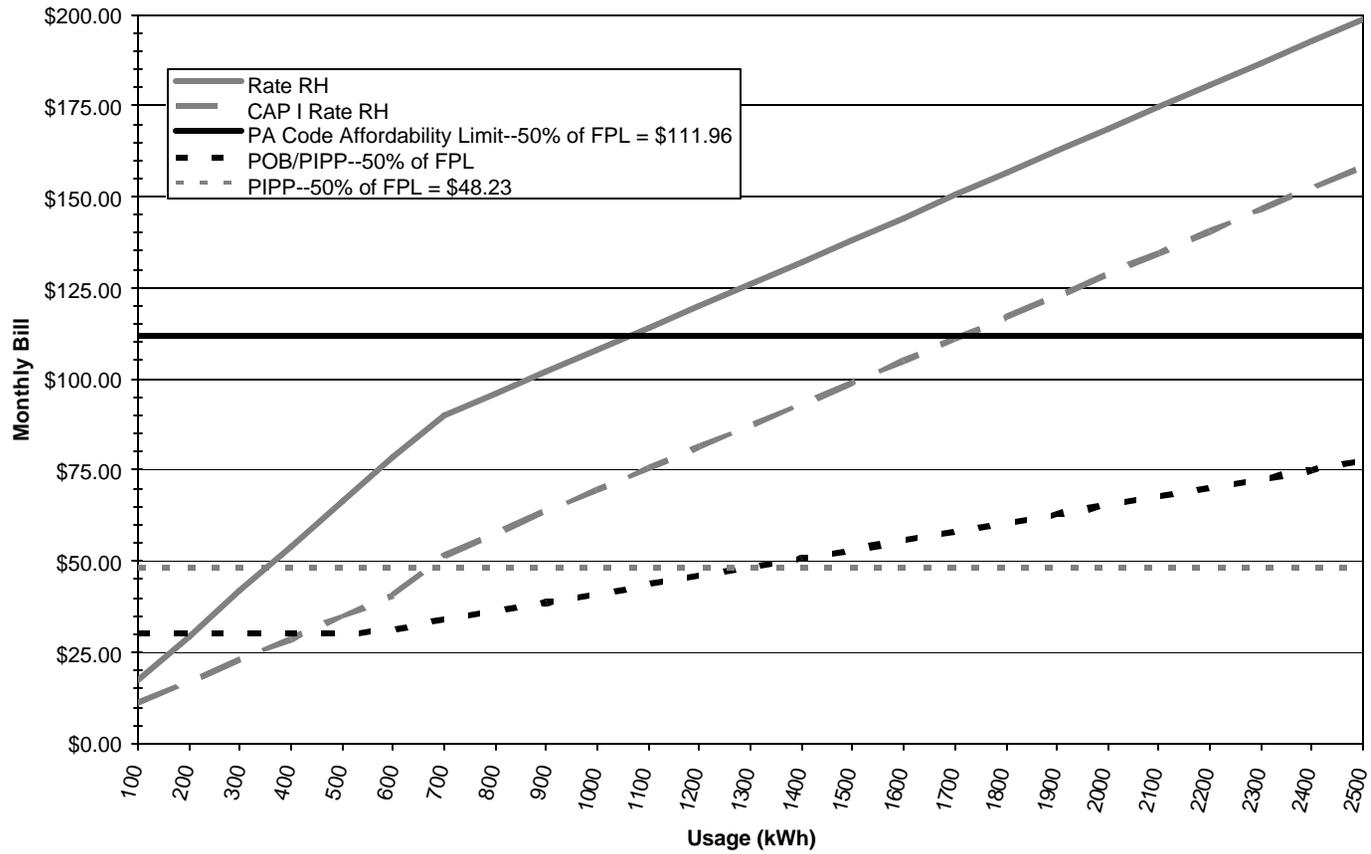
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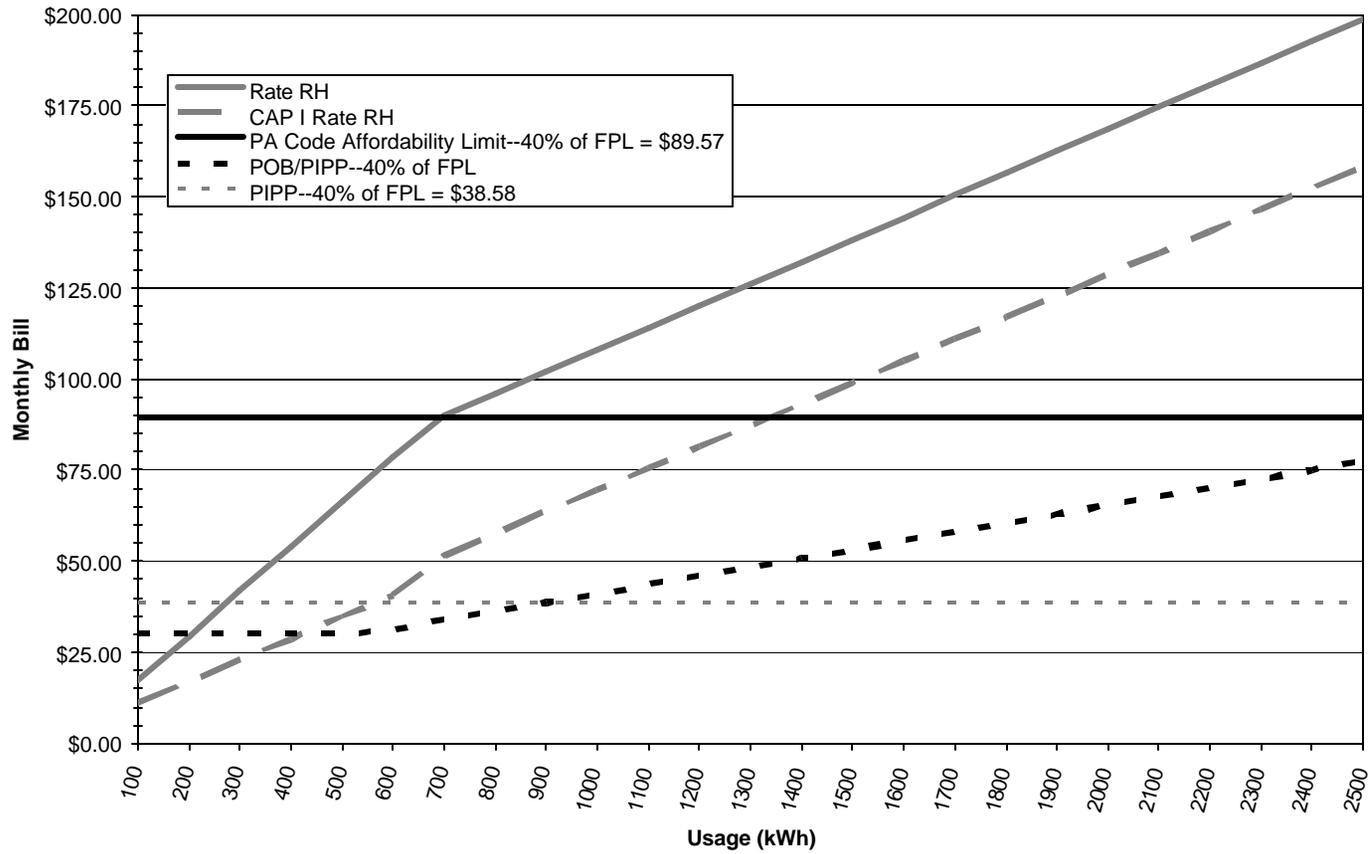
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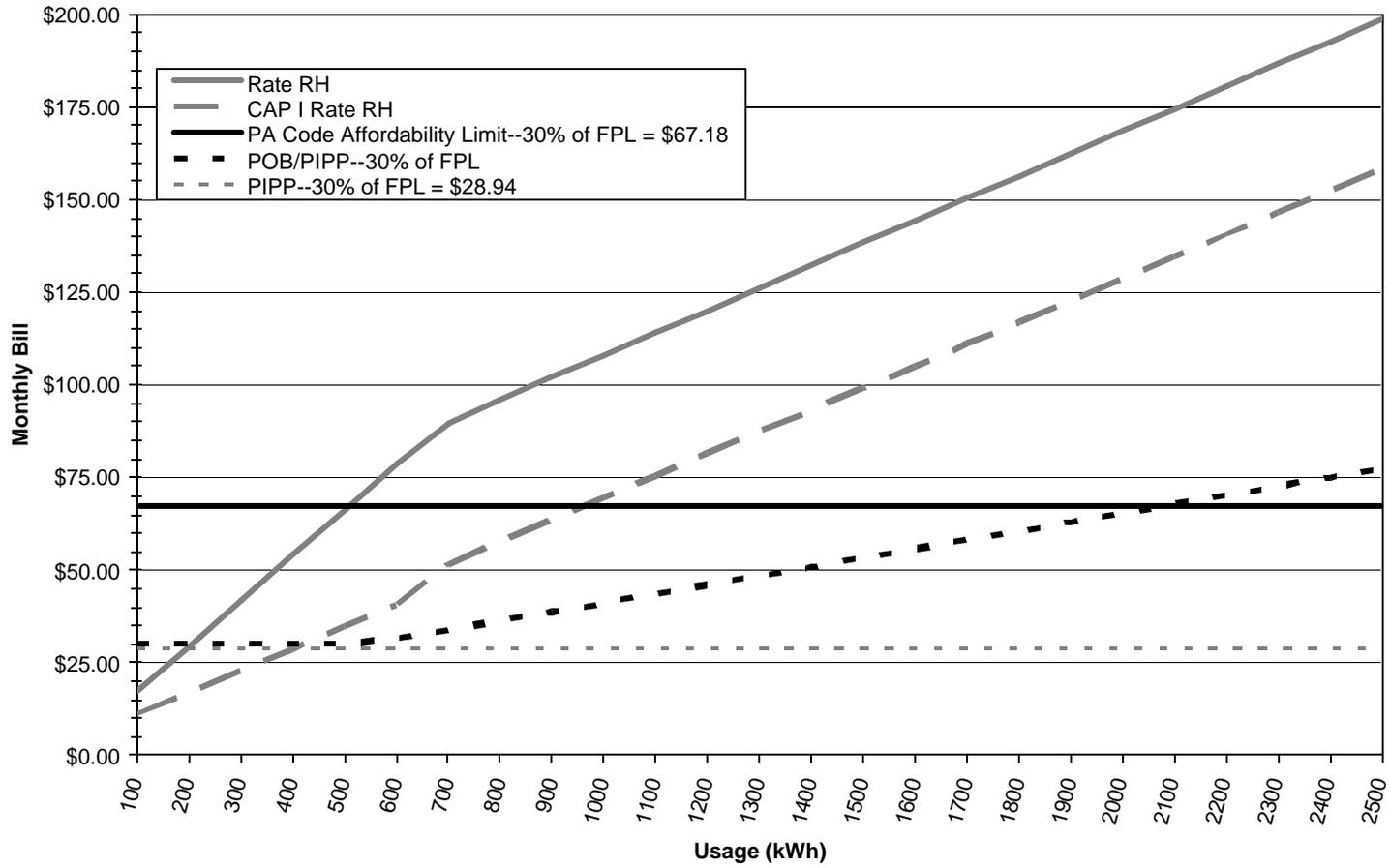
**Family Size of Five--Winter Rate RH Comparison Chart
50% of Federal Poverty Level**



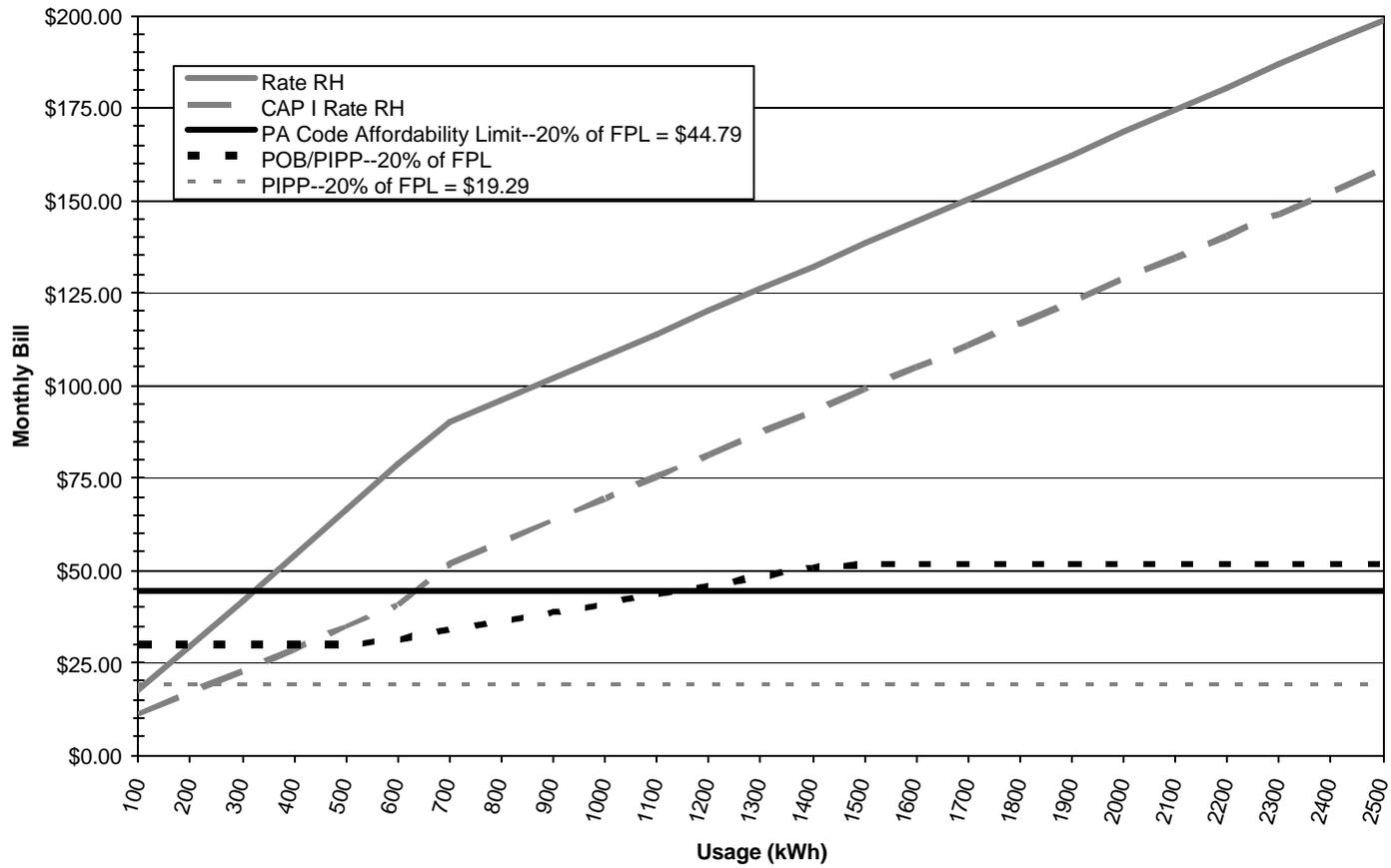
**Family Size of Five--Winter Rate RH Comparison Chart
40% of Federal Poverty Level**



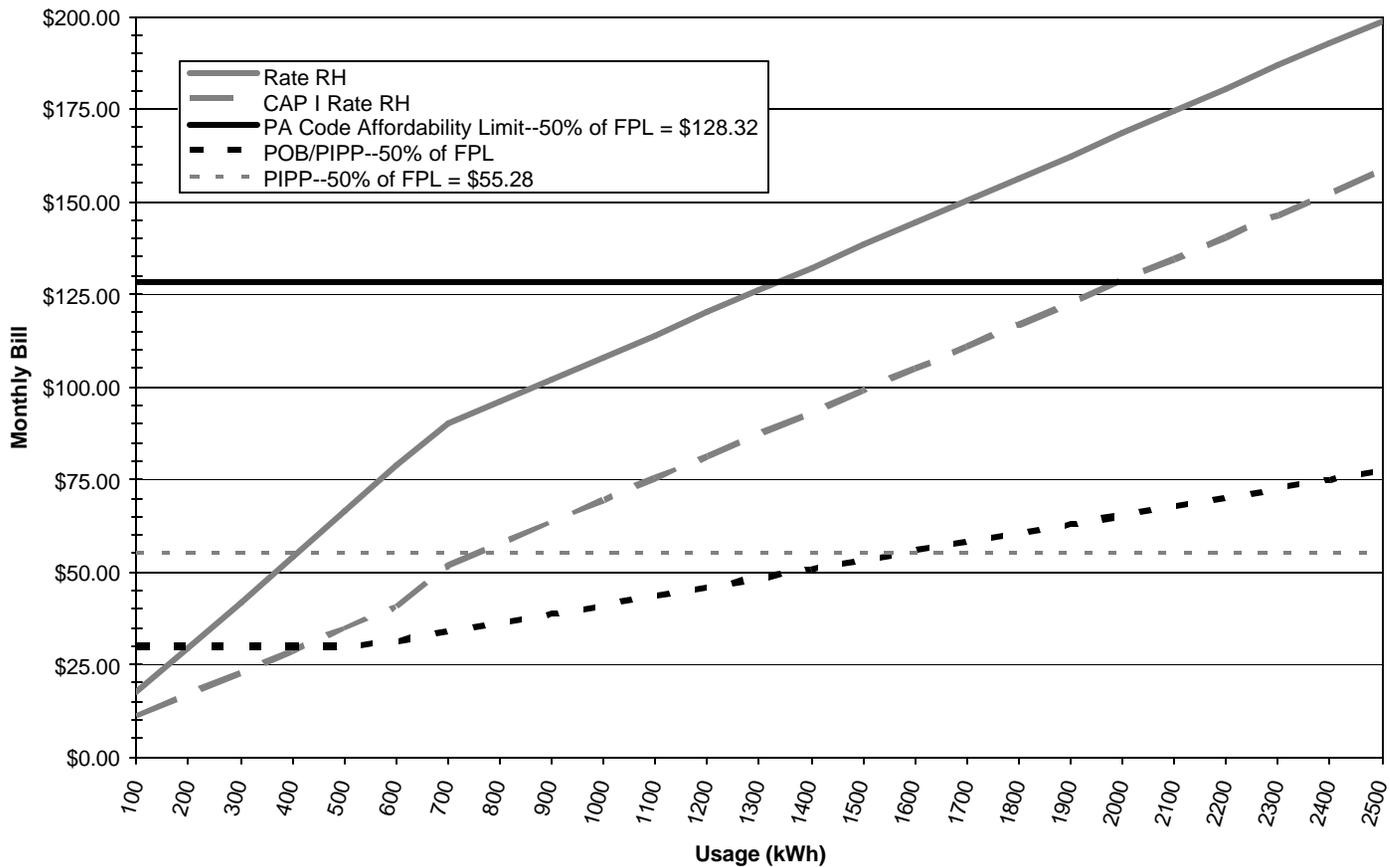
**Family Size of Five--Winter Rate RH Comparison Chart
30% of Federal Poverty Level**



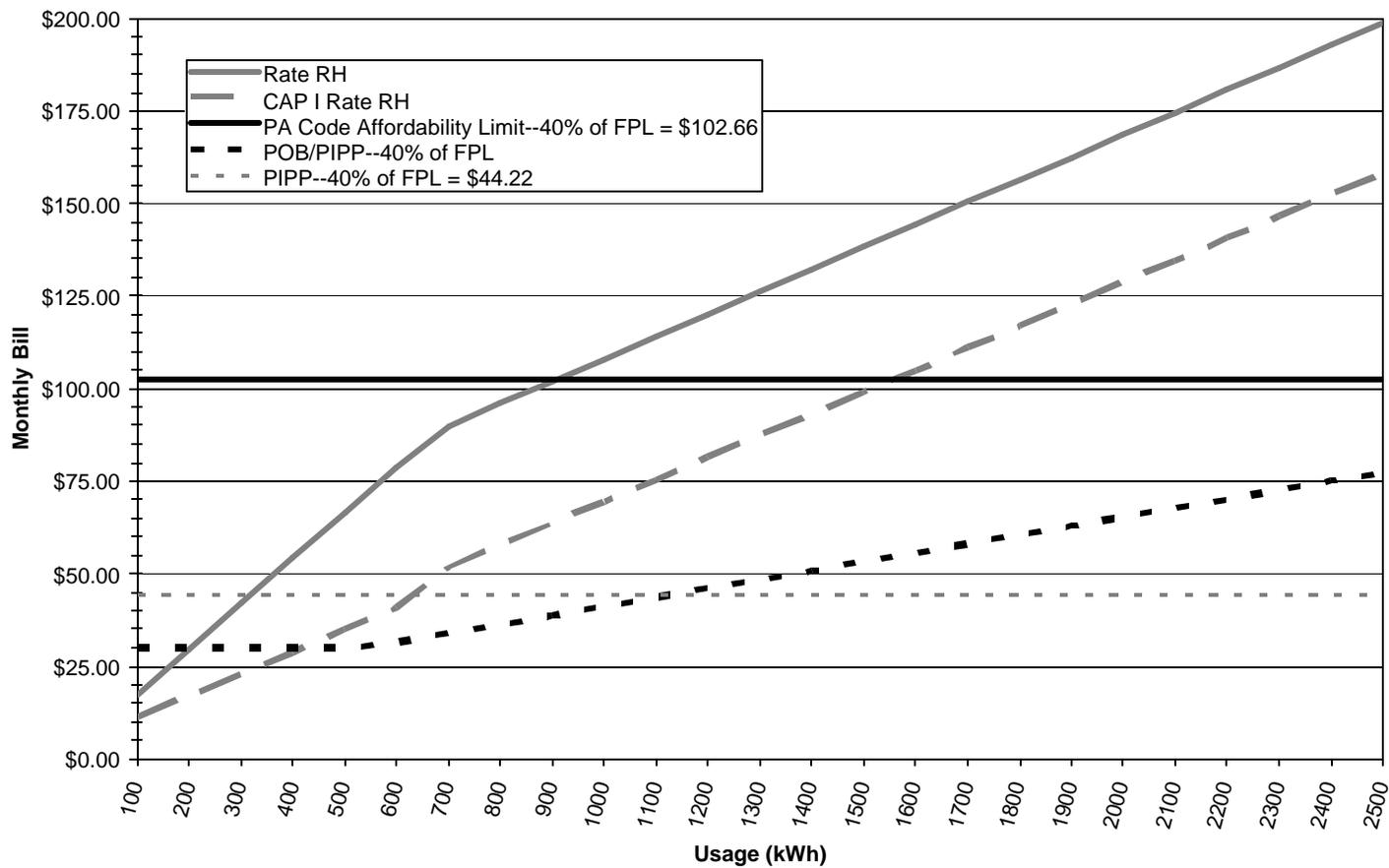
**Family Size of Five--Winter Rate RH Comparison Chart
20% of Federal Poverty Level**



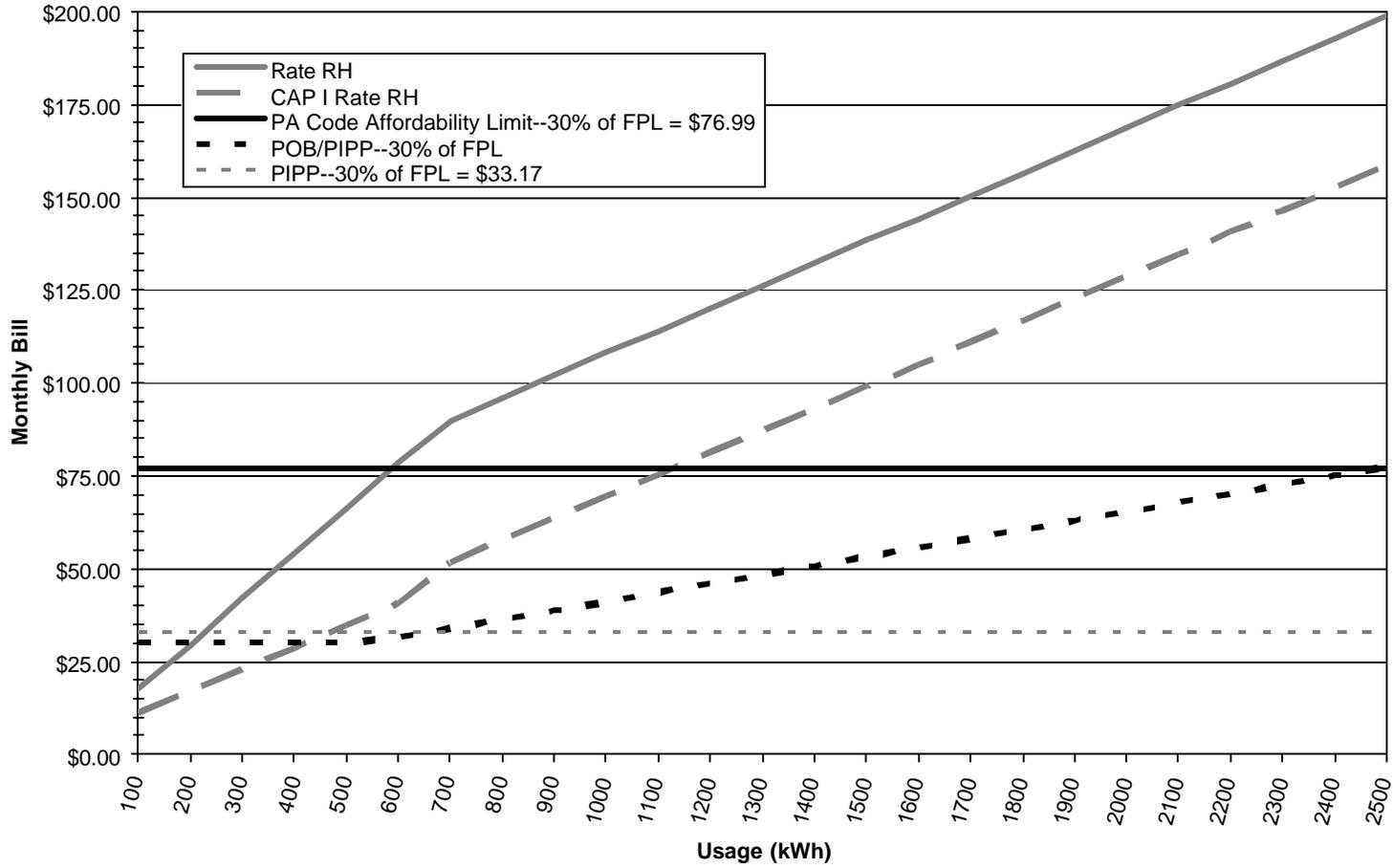
**Family Size of Six--Winter Rate RH Comparison Chart
50% of Federal Poverty Level**



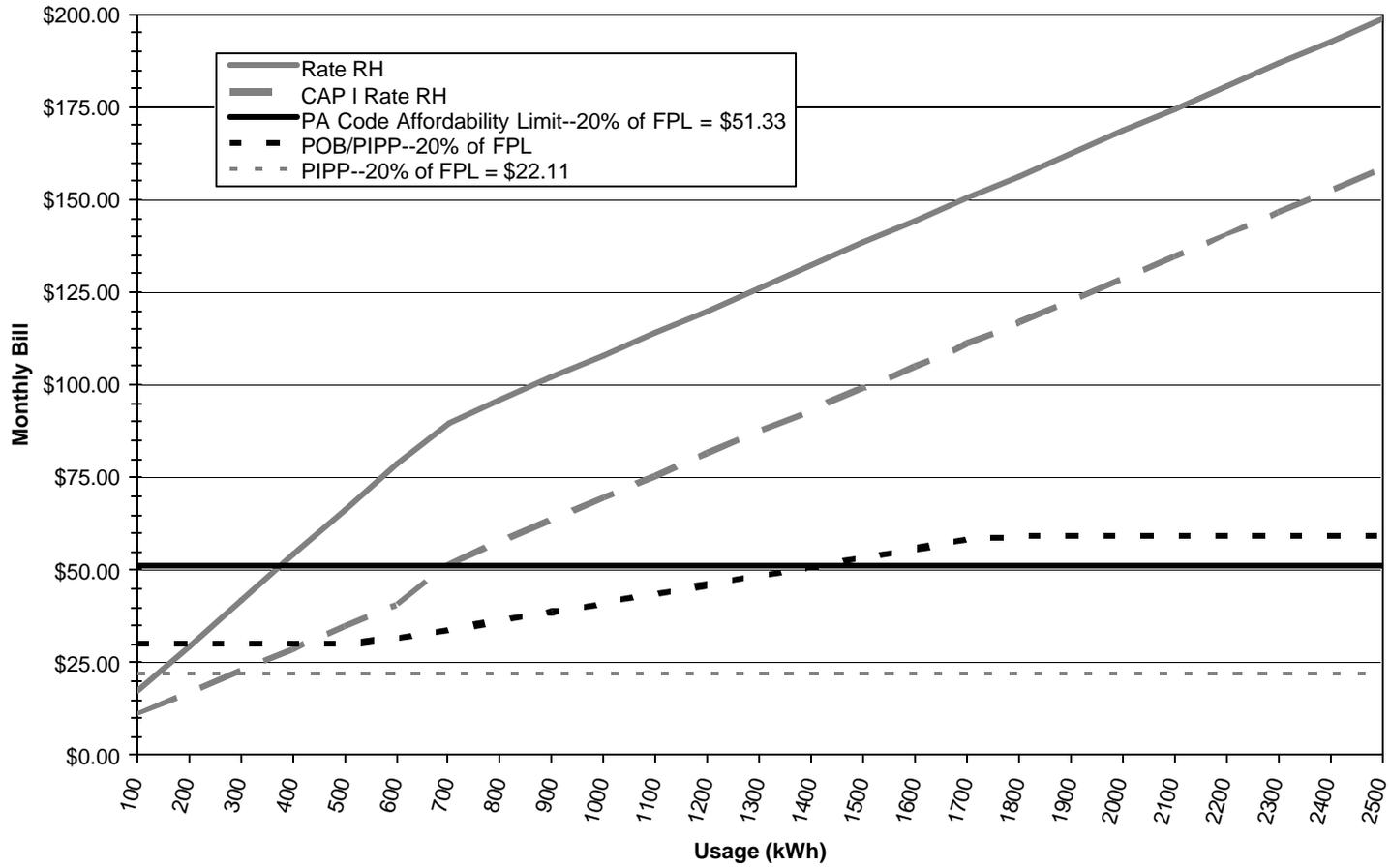
**Family Size of Six--Winter Rate RH Comparison Chart
40% of Federal Poverty Level**



**Family Size of Six--Winter Rate RH Comparison Chart
30% of Federal Poverty Level**



**Family Size of Six--Winter Rate RH Comparison Chart
20% of Federal Poverty Level**





Data Issues

XX. DATA

The average payment rate for CAP programs for all utilities in Pennsylvania is 81%.⁵⁶ According to payment data reported by PECO to the Commission, customer payment behavior improved each year in the previous POB/PIPP program design (the design prior to CAP Rate), reaching a payment rate of nearly 90%. In contrast, the payment rate for CAP Rate design has declined to 64%.⁵⁷ However, PECO informed the Commission that its calculation of payment rate does not conform to the Commission's definition, and that its data in this area is unreliable.⁵⁸

This study also surfaced a number of data problems. First, we requested data for the period in which POB/PIPP customers were transferred in whole into CAP Rate, since we were concerned to examine what happened to bills and payments in the shift. However, data prior to February 1999 was not made available. The reason for the unavailability of the data that would show the customer experience of transition between the different bill patterns of the two program structures was that data for this period was damaged. According to PECO, this was due to programming errors in the intensive programming effort to accommodate "Choice."

Second, the patterns in the termination data we have been supplied suggests that the data is not complete. This is one of many outstanding data issues that is ongoing and will need to be resolved by mid-summer of 2002 in preparation for the final report.

Third, there has apparently been a serious lack of control over the call centers in the entry of poverty data, and/or a problem in carrying out and recording data for yearly re-evaluations. The year chosen for analysis for this study was Calendar Year 2000. This choice provides a stream of back data beginning in February of 1999 as well as approximately an additional year

⁵⁶ Docket No. M-00001418, PECO's Submission of Universal Service and Energy Conservation Plan in Compliance with Section 54.74, Order of September 28, 2000, P. 9, Line 14.

⁵⁷ Ibid., P. 10, Line 10, with accompanying graph.

⁵⁸ Ibid., P. 10, Lines 1-4.

of data from 2001. The problem of uncoded poverty data is illustrated in Figures XX-1 through XX-3.

PECO CAP & Confirmed Low-Income Households, 2000					
Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6
	Income Block			Total CAP	Confirmed Low-Income
	0-50%	51-100%	101-150%		
January	43,130	26,068	12,752	81,950	190,471
February	43,035	26,385	12,965	82,385	190,441
March	42,738	27,077	13,224	83,039	190,657
April	42,287	27,700	13,525	83,512	193,412
May	41,591	27,978	13,626	83,195	193,781
June	40,915	29,805	14,558	85,278	193,570
July	40,531	30,287	14,777	85,595	192,721
August	39,791	31,186	15,205	86,182	193,708
September	39,108	31,943	15,562	86,613	193,052
October	34,250	34,273	16,364	84,887	193,730
November	33,487	33,667	16,016	83,170	190,995
December	32,770	33,524	15,911	82,205	193,664
Average	39,469	29,991	14,540	84,001	192,517

Source: PECO Universal Services Reporting Requirements, Input Document, December 13, 2001.

Figure XX-1: 2000 Data As Filed (Col. 1-5)

When the evaluation attempted to “true up” the data provided for the evaluation database with the Calendar Year 2000 Reporting Requirements filing, many thousands of cases were initially missing from the 0-50% poverty range. The resolution was that approximately 29,000 cases in the range from 0-50% of the Federal Poverty Level are not coded with the poverty level or with the household income or household size. The company follows a rule of placing into the 0% of poverty all cases for which it has no computerized poverty information.

With this additional data the total CAP numbers (Figure XX-2) from the evaluation database true up to the Calendar Year 2000 Reporting Requirements filing to a very close approximation. This occurs when all CAP cases without poverty data are assigned to 0% of poverty.

Total CAP - Calendar Year 2000			
Total CAP Reported	Total CAP (Data)	Over Claim	% Over Claim
81,950	79,998	1,952	2.4%
82,385	80,741	1,644	2.0%
83,039	80,964	2,075	2.5%
83,512	81,378	2,134	2.6%
83,195	82,209	986	1.2%
85,278	82,043	3,235	3.8%
85,595	83,073	2,522	2.9%
86,182	83,727	2,455	2.8%
86,613	84,700	1,913	2.2%
84,887	83,891	996	1.2%
83,170	81,975	1,195	1.4%
82,205	80,419	1,786	2.2%
84,001	82,093	1,908	2.3%

Figure XX-2: True-Up Table

It is, of course, to the benefit of those customers allocated to 0% of poverty for the Company to give the benefit to the customer and allocate customers with unknown poverty levels to the tier with the higher discount. However, PECO needs to be able to show the right customers are assigned to the correct discounts. For evaluation purposes cases recorded at 0% of poverty from the study, where possible, are excluded. Cases with poverty indicators from 1 to 50% of poverty were used.

Figure XX-3, Column 6 shows this difference, in detail.

Although the payment data provided for the evaluation database is adequate, the billing data was provided in a form that requires the independent programming of a utility billing system to organize it in a form that will permit the forms of analysis usually submitted to the Bureau of Consumer Services. This placed constraints on the billing/payment analysis in this report, but should be resolved by midsummer.

Finally, we note that there are often large gaps of several months in the meter reads for persons in the 0-50% of poverty group.

PECO CAP & Confirmed Low-Income Households, 2000									Not Included	Check
Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col.9	Col. 10	Col. 11
Month	Poverty Level Block					Total CAP	Not in CAP (LITS)	Confirmed Low-Income	Accounts Not in Service	Evaluation Database Check Total
	1-50%	51-100%	101-150%	151% +	CAP: Unidentified Poverty Level					
Jan	12,812	25,076	13,727	4,468	23,915	79,998	113,531	193,529	45,369	238,898
Feb	13,187	25,628	14,052	4,513	23,361	80,741	114,254	194,995	43,903	238,898
Mar	13,549	26,055	14,362	4,549	22,449	80,964	114,867	195,831	43,067	238,898
Apr	14,003	26,686	14,654	4,598	21,437	81,378	116,121	197,499	41,399	238,898
May	14,444	27,511	15,029	4,697	20,528	82,209	117,701	199,910	38,988	238,898
Jun	14,731	28,241	15,423	4,748	18,900	82,043	118,647	200,690	38,208	238,898
Jul	15,295	29,363	16,010	4,843	17,562	83,073	118,539	201,612	37,286	238,898
Aug	15,872	30,222	16,426	4,779	16,428	83,727	119,034	202,761	36,137	238,898
Sep	16,577	31,197	16,902	4,685	15,339	84,700	119,663	204,363	34,535	238,898
Oct	16,995	31,688	17,094	4,375	13,739	83,891	121,464	205,355	33,543	238,898
Nov	17,197	31,867	17,021	3,983	11,907	81,975	124,131	206,106	32,792	238,898
Dec	17,547	32,023	17,004	3,627	10,218	80,419	126,732	207,151	31,747	238,898
Average	15,184	28,796	15,642	4,489	17,982	82,093	118,724	200,817	38,081	238,898

Source: Evaluation Database, Run Revision of 5/4/2002.

Figure XX-3: The Evaluation Database for the Study.



Survey

XXI. UNIVERSAL SERVICE SURVEY QUESTIONS

The survey questions follow this page.

**PECO Universal Services
Process Evaluation Survey Questions
Revised 3/15/02**

Hello, my name is _____. Thank you for taking the time to participate in our survey about some of PECO's programs. I am an independent contractor, working with several others, who have been hired by PECO. I will be asking questions about your experiences with PECO and some questions to find out more about you. Your answers will help us better understand how these programs work and help us find ways to improve them in the future.

Answers to this survey will be reported as a group, without identification of the person who answered the questions. PECO will only see the answers reported for the group as a whole.

If you agree to participate in this survey, Please read and sign the following consent form. At the end of the survey we will pay you \$25 for your help today.

You may ask me any questions you would like if you need help to understand the question.

CONSENT

I agree to participate in this survey. I understand my answers will be written down and that participation in the survey is by my own free will and it is completely voluntary. If there are any questions that I do not want to answer, I will simply choose not to answer them.

I understand that my answers are not confidential, because, for example, the independent program evaluators may see the completed survey form.

I understand that NO reports will use my name to identify my answers. And, I understand that the results of the survey will be presented using information from all the people who participated, and reports will present results for the group as a whole.

Name

Date

PECO Universal Services
Process Evaluation Survey Questions
Revised 3/15/02

INTERVIEWERS: Circle the number or letter of the response given, and write notes clearly.

A1. For our future interviews with other people, could you tell me if there are Agencies or locations where you would have gone for an in-person interview?

1. Yes: _____
2. No

SECTION A: ENERGY USE AND BILLS

A2. Do you have trouble controlling or managing energy use in your home?

1. Yes (**Answer A2a**)
2. No Probe why not _____ then **Skip to A3**)
3. Don't know (**Skip to A3**)

A2a: If yes,

Why? (Circle the response; probe if necessary)

1. Poor housing stock (old building, broken windows, leaking walls, etc.)
2. Furnace malfunctions or heater broken
3. No money to make improvements
4. Lack of knowledge regarding ways to save energy
5. Central heating; no way to control individual use
6. Poor quality or old windows (for broken windows, circle 1)
7. Other: specify _____

A3. How do you heat your home? (*Mark the unaided answers, then ask specifically each option not mentioned*)

	Unaided (yes)	Aided (yes)
1. Gas	_____	_____ (mark A4=1 & go to A5)
2. Electricity	_____	_____ (Go to A4)
3. Kerosene	_____	_____ (Go to A3a)
4. Space Heaters	_____	_____ (Go to A3a)
5. Oven	_____	_____ (Go to A3a)
6. Propane heaters	_____	_____ (Go to A3a)
7. Don't Know	_____	
8. Other (specify) _____		

A3a. How long have you used (*this heating source*) to heat your home?
 _____ (months or years—specify)

If more than one heating sources is used, indicate which one they are talking about:

Process Evaluation Survey Questions

A3b. Since you have been using (*this heating source*) have you noticed if people in your home have been sick more often than when you did not use *this heating source*?

1. Yes A3c. Describe why you think this (What happened?)
2. No

A3d Do you have worries or concerns about using these heating sources?

1. Yes
 A3e *If Yes: Why?*
2. No

A4. Have you ever heated your home with natural gas?

1. Yes (*Continue*) *Mark Yes if A3 is marked for Gas heat*
2. No (**Skip to A7**)

A5. Who is (was) your Gas supplier?

1. Philadelphia Gas Works (PGW)
2. Philadelphia Electric Company (PECO)
3. Other, specify _____
4. Don't Know

A6. During the past 12 months, have you been able to make your minimum monthly payment for your **gas bill?** (**Either PECO or PGW**)

1. Yes
2. No

A6a. If no: Why haven't you been able to make your minimum gas bill?

A7. How about your **electric bill** to PECO, have you been able to make your minimum monthly payment on this for the past 12 months?

1. Yes
2. No

A8. Which seems harder for you to pay on a regular basis, your gas or electric bill?

1. Gas
2. Electric
3. Both – they are both equally hard to pay
4. Neither are difficult

A9. Has your gas or electric service ever been shut off?

1. Yes (*Continue*)
2. No (**Skip to A11.**)

A10. Why were you having difficulty paying your gas or electric bill at the time your service was terminated? (*Open ended*)

A11. Do you own or rent your current home?

1. Own
2. Rent

Process Evaluation Survey Questions

3. Other, specify _____
- A12. Do you have full local telephone service?
1. Yes
 2. No

**SECTION B: QUESTIONS ABOUT EXPERIENCE WITH PECO
AND PERCEPTIONS OF UNIVERSAL SERVICES**

Now I'd like to talk a little about your experiences with PECO and some of their programs.

- B1. Have you ever heard about any of PECO's programs for helping customers with their energy bills?
1. Yes
 2. No

- B2. Have you ever heard about the Universal Services Program or PECO's low-income programs?
1. Yes
 2. No

- B3. Which of the PECO's programs have you heard about?
*(Mark all mentioned unaided first. Then PROBE if **not** mentioned. Ask about each item)*

	Unaided	Aided	
	Yes	Yes	No
1. Never heard of US before today	_____		
2. "CAP RATE" program	_____	_____	_____
3. Weatherization Program (LIURP)	_____	_____	_____
4. CARES	_____	_____	_____
5. A. LIHEAP Cash grants	_____	_____	_____
B. LIHEAP Crisis grants	_____	_____	_____
6. MEAF or UESF	_____	_____	_____
7. Other energy assistance	_____	_____	_____
8. Don't know	_____		

READ TO ALL: Universal Service is a set of programs that helps ensure that all customers receive continuous electric and gas service by finding ways for customers to better manage their energy use and afford to pay their bills.

- B4. What do you think about the Universal Services Program?
(DO NOT READ. Check all that apply)
1. A good program for low-income and poor customers _____
 2. Not a good program for low-income and poor customers _____
 3. The program needs improvement _____
 4. The program helps me pay gas and/or electric bills _____
 5. Any other: Specify _____

Process Evaluation Survey Questions

- B5. Where have you heard the term “Universal Services” used?
1. Have not heard it before this survey
 2. PECO Representative
 3. Nonprofit Agency
 4. Newspaper
 5. TV/Radio
 6. Other: _____
 7. Don't recall
- B7. Have you ever called the Universal Service **or** CAP RATE 800 number?
1. Yes
B7a. If yes: For what reason? _____
 2. No (**Skip to B6 below**)
- B8. Were you satisfied with the answer to your question or concern?
1. Very satisfied
 2. Moderately satisfied
 3. Neutral
 4. A little dissatisfied
 5. Very Dissatisfied (**Answer B8a**)
B8a. Why were you not satisfied with the response? _____
- B6. How helpful have the programs you're familiar with been to you? Would you say (*read responses*)
1. It has been very helpful
 2. It has been somewhat helpful
 3. Neutral—neither helpful nor unhelpful
 4. It has been somewhat unhelpful
 5. It has not been helpful at all
- B9. Have you been treated courteously by the people involved in the Universal Services programs?
1. Yes
 2. No
B9a. If no: What happened? _____
 3. No opinion
- B10. Was it hard to apply for any of PECO's Universal Services programs?
1. I didn't sign up for anything
 2. Yes
 3. No
B10a. If yes: Why was it hard? _____

Process Evaluation Survey Questions

B11. Have you ever obtained any financial assistance to help pay your overdue utility bills?

1. Yes

B11a. If yes: Which bills?

1. PECO bill
2. PGW bill
3. Water bill (Water Revenue Bureau)
4. Oil
5. Don't know

2. No

3. Don't know

B12. Did you get any help with your heating or utility bills **in the last 12 months?**

1. Yes (**Answer B12a**)

B12a. If yes: From what source? PROBE (*Read the list*):

1. LIHEAP cash grant (Low Income Heating Assistance Program)
2. LIHEAP CRISIS
3. MEAF or Hardship Fund or UESF
4. Other, specify _____
5. Don't remember

2. No

3. Don't know

B13. Have you ever wanted help with your PECO bill but couldn't get it?

1. Yes (**Answer B13a**)

B13a. If yes: What happened? (*Do not read*)

1. Did not know where I could get help
2. Tried to get help but was unsuccessful (general)
3. I did not qualify for help, was turned down
4. Too much trouble, red tape required to get help
5. Did not want to provide information required to get help
6. Other _____
7. Don't recall

2. No

B14. When you pay your PECO bill, do you mail it to PECO or do you pay your bill in person at a location close to home?

1. Mail it to PECO (**Skip to B15**)

2. Pay in person at a PECO pay station (**Answer B14a**)

3. Sometimes mail it and sometimes pay in person (**Answer B14a**)

4. Don't know; someone else pays the bill (**Skip to B15**)

If answer #2 or #3, ask:

B14a. When you pay in person, do you have to pay an extra fee, like one or two dollars in addition to your bill?

1. Yes _____ \$
2. No
3. Don't know

Process Evaluation Survey Questions

- B15. Have you ever heard anyone say a PECO pay station is “authorized” or “unauthorized”?
1. Yes
B15a. If yes: What do you think it means? (*no assist*)
 2. No

- B16. How easy do you feel it is to read your PECO bill each month?
1. Very easy to read
 2. Somewhat easy to read
B16a. If 1 or 2: What do you like or find easy about the bill?
 1. Lots of good information
 2. Just the right amount of information
 3. Clearly presented
 4. Easy to get to the bottom line
 5. Don't know
 6. Other _____
 3. Neither easy or no easy
 4. Somewhat hard to read
 5. Very hard to read
B16b. If 4 or 5: Why?
 1. Too much information on the bill
 2. Poorly designed
 3. Hard to find the bottom line of how much to pay
 4. Don't know
 5. Other _____

SECTION C: CURRENT CAP RATE STATUS

Now I am going to ask some questions about PECO's CAP programs. These are programs that place a limit on the rate you pay for your electricity or gas if you agree to make your payments on time.

- C1. Have you ever been on CAP RATE?
1. Yes
 2. No
 3. Don't Know
- C1a. If no or don't know, ask:** Have you ever paid less than the **regular rate** for your PECO electric or gas bill?
1. Yes (**Continue with C2**)
 2. No (**Skip to SECTION E**)
 3. Don't know (**Skip to SECTION E**)

Process Evaluation Survey Questions

***** CAP ONLY *****

- C2. Did you participate in the old CAP Program that ended in 1998?
1. Yes

C2a. If yes: Do you remember if your monthly payments were more, less, or about the same as you pay each month now?

 1. More
 2. Less
 3. About the same
 4. Can't remember
 2. No
 3. Don't know
- C3. Are you on CAP RATE now?
1. Yes
 2. No
 3. Don't know
- C4. How did you hear about CAP RATE?
1. PECO rep told me about it when I called with payment problems
 2. Nonprofit Agency
 3. Newspaper
 4. TV/Radio
 5. Other : _____
- C5. Why did you apply for CAP RATE? _____
- C6. Do you remember when you started on the CAP RATE? _____month/year ____
- C7. Once you applied for CAP RATE, how long did it take for you to be placed on CAP RATE and start paying the new rate?
1. It happened immediately -- the new rate was on my next bill
 2. One month
 3. Two months
 4. Three months
 5. More than 3 months
 6. Don't know when the RATE took effect
- C8. To be on the CAP RATE, you have to provide information about your income status to PECO. Was it clear what income information PECO wanted you to provide?
1. Yes
 2. No
 3. Don't recall

Process Evaluation Survey Questions

C9. Did you have any difficulty providing this income information?

1. Yes

C9a. If yes: Why is that? (*Do not read*)

1. Hard to get the documents
2. Too much paperwork
3. Did not have everything they wanted
4. Difficulty sending it to PECO (taking it in or mailing it)
5. Did not want to provide the information
6. Don't recall
7. Other _____

2. No

C10. What was your **AVERAGE** monthly PECO bill **before** you started CAP RATE?
\$____ per month

Interviewer: please confirm that this is Electric or Combined Gas and Electric bills from PECO.

C10b. Electric _____ Combined Gas and Electric _____

1. Less than \$10/month
2. Between \$10 and \$25
3. Between \$25 and \$50
4. Between \$50 and \$75
5. Between \$75 and \$100
6. Over \$100 per month (if higher than that, have them guess _____)
7. Don't know

C10c. If respondent gets a separate PGW bill for gas, what is your average **PGW gas bill?**

\$____ per month

1. Less than \$10/month
2. Between \$10 and \$25
3. Between \$25 and \$50
4. Between \$50 and \$75
5. Between \$75 and \$100
6. Over \$100 per month (if higher than that, have them guess _____)
7. Don't know

C11. What is the highest PECO bill you have paid in the past 12 months? _____

Don't know highest bill (check here) _____

C11a. What month was that? (summer or winter?) _____

C12. Is the CAP RATE you are paying now: (Read and rotate responses)

1. More affordable than what you were paying before
2. Still too high
3. Not much difference/about the same
4. Don't know/refused

Process Evaluation Survey Questions

- C13. Do you know how much your payment is discounted on CAP RATE?
1. Yes

C13a. If yes: How much is it discounted from the regular rate?
(do not assist) _____ percent for _____
 2. No
 3. No answer given
- C14. What is your **AVERAGE** monthly PECO bill **AFTER** you started CAP RATE?
\$_____ per month
1. Less than \$10/month
 2. Between \$10 and \$25
 3. Between \$25 and \$50
 4. Between \$50 and \$75
 5. Between \$75 and \$100
 6. Over \$100 per month (if higher than that, have them guess_____)
 7. Don't know
- C15. How satisfied are you with CAP RATE? Would you say (*read responses*)
1. Very satisfied
 2. Moderately satisfied
 3. Neutral
 4. A little dissatisfied (**Answer C12a**)
 5. Very dissatisfied (**Answer C12a**)
- If answer #4 or #5, ask**
C15a. Why are you dissatisfied with CAP RATE? (*specify*)
- C16. When you signed up for CAP RATE, did PECO tell you what would happen if you didn't pay your bill?
1. Yes

C16a. If yes: What would happen? (*open ended, no assist*)
 2. No
 3. Don't remember
- C17. Is there anything else you would like us to know about your experiences with CAP RATE (*such as when you applied, or about making payments, interactions with PECO, bill adjustments, disputes etc.*)?

SECTION D: CAP RATE RE-CERTIFICATON – CAP ONLY

- D1. Have you heard the words “reverify,” or “recertify” regarding CAP RATE?
1. Yes
 2. No

Process Evaluation Survey Questions

- D2. When you signed up for CAP RATE, did the representative talk to you about the re-certification process?
1. Yes
 2. No
 3. Don't know
- D3. Do you know that you have to sign up every year to receive CAP RATE?
1. Yes
 2. No

You said you started CAP RATE in _____. (question C6, page 7) That's been _____ months.

*If more than 11.5 months, continue. If less than 11.5 months, **Skip to the next section** and Say: PECO will contact you when it is time to recertify for CAP RATE*

- D4. Do you remember getting a letter from PECO asking you to call an 800 number to review your income so you could continue paying the CAP RATE?
1. Yes
 2. No
- D5. The letter said that you had 10 days to call and provide PECO with your income information. Do you remember making the call?
1. Yes (**Skip to D6**)
 2. No (**Answer D5a**)
- D5a. If no,** Do you remember getting a **second letter** asking you to call the 800 number to verify income in order to stay on CAP RATE?
1. Yes
 2. No
- D6. Did you call PECO or send in information so you could stay on CAP RATE? (*Ask everyone. assist if needed*)
1. **Did not call PECO or send in anything:**
 - D6a. If answer #1** ask: Why didn't you call or send in anything?
 - D6b. Did you get removed from the CAP RATE?
 1. Yes
 2. No
 3. Don't know
 2. **Called PECO:**
 - D6c. If answer #2** ask: What happened when you called?
 1. They said I did not qualify any more
 2. They asked me to send in income information
 3. Provided income by phone
 4. Don't remember

Process Evaluation Survey Questions

D6c3. if provided income by phone, mark one:

1. Income qualified by phone
2. Did not qualify & rejected by phone

D6d. if answer D6c-2 (they asked me to send income information) ask: Did you send anything?

1. Yes
2. No
3. Don't know

3. Sent income information to PECO:

D6e. If answer #3 ask: What happened when you sent information?

1. They said I did not qualify any more
2. They asked me to send more information
3. Don't know

D6f. if answer D6e-2 ask: Did you send anything?

1. Yes
2. No
3. Don't know

D6g. Did you get removed from the CAP RATE?

1. Yes
2. No
3. Don't know

4. Other answer given:

D7. Did you use the self addressed stamped envelope to send the income information to PECO?

1. Yes
2. No
3. Don't remember getting one
4. Don't remember how I sent it in
5. Other _____

D8. Is there anything else you would like us to know about your experience with the re-certification process? (*Open ended, no assistance*)

*****END OF CAP-ONLY SECTIONS*****

SECTION E: ARREARAGE FORGIVENESS

E1. In the past year, how many months in a row have you made your full monthly CAP RATE payments on time? _____ months *Don't know (check here)* ____

E2. Do you know if a past due balance can be forgiven when you are on CAP RATE?

1. Yes
E2a. If yes: What has to happen for PECO to forgive a past-due bill? (*no assist*)
2. No
3. Don't know

Process Evaluation Survey Questions

- E3. When you started on CAP RATE did you have a past due balance?
1. Yes
 2. No
 3. Don't know
 4. Not on CAP Rate

If yes to E3, ask Questions E3a through E3e

E3a. What happened to that past-due balance when you started on CAP RATE? Don't know (check here) _____

E3b. How much was the past-due amount? \$ _____
Don't know (check here) _____

E3c. Has this amount been forgiven?

1. Yes

E3d. How much was forgiven? \$ _____

E3e. When? _____ month _____ year

2. No
3. Don't know

- E4. Is there anything else you would like us to know about your experience with past-due bills or forgiveness of past due balances? (*Open ended, no assistance*)

SECTION F: PAYMENT ARRANGEMENTS

- F1. Did you know you could call PECO to make a payment arrangement if you were having trouble paying your PECO bills?

1. Yes
2. No

- F2. About how many times during the past 12 months have you talked to PECO about making a payment arrangement, but did not necessarily make a payment arrangement?

1. 1-2 times
2. 3 or more times
3. zero

- F3. Have you made a payment arrangement with PECO within the past 12 months?

1. Yes (*Answer F3a, b, c*)
2. No

F3a. If yes, How many payment arrangements have you made in the last year? _____ arrangements

F3b. For CAP ONLY: How many payment arrangements have you made since you started on CAP RATE?
_____ arrangements

F3c. If yes—CAP or not, What were the terms of the last payment arrangements that you made? (*monthly payment amount, number of months*)

Process Evaluation Survey Questions

- F4. Have you tried to make a payment arrangement and were told you could not have one?
1. Yes
F4a. If yes: What was the reason you could not have a payment arrangement?
 2. No
- F5. Have you been offered a payment arrangement but the payment amount was still not affordable?
1. Yes
F5a. If yes: What did you do?
 2. No
- F6. Is there anything else you would like us to know about your experience with payment arrangements? (*open ended, no assistance*)

SECTION G: CARES

- G1. In the last year, how many times have you called PECO for any reason?
1. Never (**Skip to Section H.**)
 3. Once
 4. 2-5 times
 5. 6-10 times
 6. More than 10 times
- G2. What agencies or programs were you referred to?
(MARK ALL MENTIONED)

1. None – not referred to any agencies	2. Not referred to any programs
3. Weatherization from PECO (LIURP)	4. Catholic Charities
5. MEAF	6. LIHEAP
7. CRISIS	8. UESF
9. Project REACH	10. Chester County CARES
11. DELCO Shares its Warmth	12. Mason Dixon CARES
13. Project HEAT	14. WAP
15. Food Stamps	16. SSI
17. TAG Housing Assistance	18. Heater Hotline
19. Blind Relief Fund	20. Episcopal Community Services
21. Emergency Repair Hotline	22. Basic Systems Repair Program
23. Senior Housing Assistance and Repair Program	24. Other, specify

Process Evaluation Survey Questions

- G3. Did you call the PECO customer service number or the Universal Services 800 number when you were referred to other programs that could help you?
(assist if needed)
1. CAP RATE 800 number
 2. Universal Service 800 number
 3. PECO Customer Service number from the back of the bill
 4. PECO Customer Service number from the phone book
 5. Don't know
- G4. Is there anything else you would like us to know about your experience with PECO's referral services? *(Open ended, no assistance)*

SECTION H: SERVICE TERMINATION

H1. We asked at the beginning of the survey whether your gas or electric service has ever been terminated. Specifically, has your PECO gas or electric service been terminated (shut off) for any reason?

1. Yes
2. No

Ask H10 of everyone

H10. Have you ever used a medical certificate to stop termination?

1. Yes

H10a. If yes: How many times have you used a medical certificate?

H10b. When (month/year) did you use a medical certificate? _____

2. No

If No to H1 and H10 above, Skip to the Next Section, Contacting PUC

H2. Was it your PECO gas or PECO electric service that was shut off?

1. Electric
2. Gas
3. Both

H3. Do you remember when your service was shut off? (if both, which _____)
_____ month _____ year (If don't remember, ask SEASON _____)

H4. **For CAP ONLY** - How long did you participate in CAP RATE before your service was shut off?

1. Shut off before CAP RATE
2. 1 - 3 months on CAP RATE
3. 4 to 6 months
4. 7 to 9 months
5. 10 to 12 months
6. More than 12 months
7. Don't remember

Process Evaluation Survey Questions

- H5. How many payments did you miss before your service was shut off? ____
Don't know _____
- H7. How many shut off notices did you get before your service was shut off?
1. One
2. Two
3. Three
4. More than 3
5. Don't know
- H8. Did you contact PECO before you were terminated?
1. Yes
H8a. If yes: How many times? _____
2. No
- H9. Did someone from PECO contact you one last time before service was shut off?
1. Yes
H9a. If yes: What kind of contact was it?
1. Phone
2. Mail
3. Both
4. Other _____
- H9b. Did the PECO representative try to help you so service would not be shut off?
1. Yes
2. No
- H11. How soon after your last shut off notice was your service terminated?
1. Less than 2 days
2. 2 days
3. 3 days
4. More than 3 days
- H12. Did you restore your service?
1. Yes (**Answer H12a--d**)
2. No (**Answer H12e--f**)

If yes, service is restored

H12a. How quickly was your service reconnected after you called PECO?
_____ Actual length (hours/days)

H12b. How long was your service terminated? ____ (hrs /days/ mo)

H12c. What did you have to do to get the service restored? (*borrow money, call PECO, etc. probe if needed*)

H12d. How much money did you have to pay to get your service restored, including deposits, reconnection fee and past due amount? \$ _____

Process Evaluation Survey Questions

If no, service is not restored, ask the following.

H12e. Why isn't service restored?

H12f. What is your current plan for getting service restored?

H13. Why were you having difficulty paying your utility bill at the time your service was shut off? (*Open ended, probe if needed*)

H14. **For CAP ONLY** - When you began having trouble paying your CAP RATE bill, did you request a payment agreement? (*assist as needed*)

1. Yes, but I could not afford the amount they wanted me to pay and had to refuse the offer
2. Yes, but they would not give me one because I had too many already
3. Yes, I got an arrangement but could not make the payments after that
4. No
5. Don't remember
6. Other answer, specify

H15. Is there anything PECO could have done that may have prevented the termination of your service?

1. Yes

H15a. If yes, What could PECO have done?

2. No

H16. Is there anything else you would like us to know about your experience with service termination? (*Open ended, no assistance*)

SECTION I: CONTACTING PUC OR BCS

I1. Have you ever contacted the Public Utilities Commission, Bureau of Consumer Services, or other legal aid organization regarding your PECO services?

1. Yes (**Answer I1a and I1b**)

If Yes,

I1a. Why did you contact the PUC, BCS, or other legal aid?

I1b. What happened after you contacted the PUC, BCS, or other legal aid?

2. No

I2. When you have a problem with your PECO services, which group do you feel is most effective at helping you resolve that problem?

2. PECO

3. PUC

4. BCS

5. Legal Aid

6. Other _____

Process Evaluation Survey Questions

Interviewer: Include in “other” things like “none of these agencies” or “I’ve never had a problem and have no experience to with these agencies” etc. Please specify response.

SECTION K: WEATHERIZATION AND ENERGY EDUCATION

- K1. Has your home been audited or provided with energy conservation measures through PECO’s Weatherization program (Low Income Usage Reduction Program – LIURP)?
1. Yes
 2. No
 3. Don’t know
- K2. Have you ever received energy education services or materials from PECO?
1. Yes
 2. No
 3. Don’t know
- K3. Have you ever inquired about energy conservation services through PECO?
1. Yes

K3a. If yes: What happened?

 1. Found out about programs and participated
 2. Found out about programs and did not participate
 3. Did not find out about any programs
 4. Don’t recall
 2. No
 3. Don’t recall
- K4. What actions have you taken on your own to conserve or save energy in your home? (*Do not read – Circle all that apply*)
1. None
 2. Low cost weatherization (weather stripping, gasket insulation, window film)
 3. Turned down thermostat/heater in winter
 4. Turned air conditioner down or off in summer
 5. Repaired broken windows or doors
 6. Major repairs – roof replacement, etc.
 7. Replaced old heating system
 8. Replaced old appliances (water heater, refrigerator)
 9. Turn off lights in unused rooms
 10. Replaced light bulbs with energy efficient bulbs
 11. Don’t know
 12. Other _____
- K4a. Did any organization help you with this work by providing information or services?
1. Yes: What organizations? _____
 2. No

Process Evaluation Survey Questions

- K5. What do you think could happen if you tried to save energy at home?
(Interviewer: don't read the list, but check all that apply. Add any other items not listed)
1. My bill could go down and I could save money.
 2. My bill could go up.
 3. Nothing will happen.
 4. If I use less someone else will get to use more.
 5. I could use less electricity or gas.
 6. I could help the environment.
 7. I could help the utility company keep energy prices low.
 8. It will improve the country's energy future.
 9. Other
- K6. Is there anything you would like us to know about your experience with trying to save energy? *(open ended, do not assist)*

SECTION L: CUSTOMER CHOICE

- L1. Do you remember receiving information that told you that you had a choice in your gas or electric service provider and you could switch suppliers?
1. Yes *(Continue)*
 2. No *(Skip to L4)*
 3. Don't know *(Skip to L4)*
- L2. Did you decide to switch suppliers?
1. Yes, decided to switch suppliers

L2a. If yes: Which supplier did you switch?

 1. Gas
 2. Electric
 3. Both

L2b. Who is the supplier(s) you switched to? _____

L2c. Has switching made a difference in the amount of your bill?

 1. Higher than before
 2. Lower than before
 3. Doesn't seem to make a difference

L2d. Did you switch back?

 1. Yes
 2. No
 3. Don't know
 2. No, decided not to switch suppliers

L2e. Why did you decide not to switch suppliers?

 3. PECO decided to switch me without my knowledge or permission

Process Evaluation Survey Questions

- L3. Are you satisfied with your decision to switch or not switch suppliers? Would you say (*read responses*)
1. Very satisfied
 2. Moderately satisfied
 3. Neutral
 4. Moderately dissatisfied (**Answer L3a**)
 5. Very dissatisfied (**Answer L3a**)

If answered #4 or #5, ask

L3a. Why aren't you satisfied with your decision to (*or not to*) switch?

- L4. Were you ever switched to another supplier without asking to be switched?
1. Yes

L4a. If yes: Did you switch back to PECO?

 1. Yes
 2. No
 2. No
 3. Don't know

- L5. Is there anything else you would like us to know about choosing other suppliers?

SECTION M: OVERALL SATISFACTION WITH PECO

- M1. Thinking about all of PECO's programs we have talked about, how satisfied are you with these programs?
1. Very satisfied
 2. Moderately satisfied
 3. Neutral
 4. Moderately dissatisfied
 5. Very dissatisfied
- M2. Thinking now about the service you receive from PECO representatives, how satisfied are you with the service you have received?
1. Very satisfied
 2. Moderately satisfied
 3. Neutral
 4. Moderately dissatisfied
 5. Very dissatisfied
- M3. Have you ever been treated disrespectfully by any of PECO's representatives?
1. Yes

M3a, If yes: What happened?
 2. No

Process Evaluation Survey Questions

SECTION N: PARTICIPANT HEALTH

We have finished the questions about PECO Energy and it's programs. The last set of questions is for categorization purposes so we can group your answers with others. These questions deal with your education, financial situation, health and life events. Please tell me if you don't wish to answer a question if it makes you feel uncomfortable.

First, we are interested in how peoples' health affects their ability to maintain self-sufficiency.

N1. In general, would you say your health is

1. Excellent
2. Very good
3. Good
4. Fair **(Answer N1a)**
5. Poor **(Answer N1a)**

N1a. How much do your health problems keep you from doing the activities most people do?

1. A lot
2. Some
3. A little
4. Not at all

N2. Does anyone living with you in your home have a health problem?

1. Yes

N2a. If yes: What is the health problem?

2. No
3. Don't

N2B. Does anyone in your household have asthma, or asthma-like symptoms, or breathing problems?

1. Yes
2. No
3. Don't know

N3. Do you think people in your household have more sickness today, less sickness, or about the same amount of sickness as they did five years ago?

1. More
2. Same
3. Less
4. Don't Know

N4. Do you think people in your neighborhood have more sickness today, less sickness, or about the same amount of sickness as they did five years ago?

1. More
2. Same
3. Less
4. Don't Know

Process Evaluation Survey Questions

- N5. Do you have health coverage for you and your family?
1. Yes, me and my family (**Answer N5a**)
 2. Just for myself (**Answer N5a**)
 3. No (**Skip to N6**)
- If answer #1 or #2, ask**
- N5a. Do you have to pay for all or part of your health coverage?
1. All
 2. Part
 3. Other, specify _____
 4. No, Who pays for the insurance? _____
- N6. Do you think you and the people in your home are getting adequate preventive health care?
1. Yes
 2. No
 3. Other _____

SECTION O: LIFE EVENTS

O1. In the past six months, did any of these events occur?

Event	Check if Yes
a) There was not enough money to buy something important needed for the family, such as food or clothing.	
b) Looked for a job—made contacts, calling, applying, or interviewing.	
c) Did not have enough money to pay the bills.	
d) Had contact with unemployment or welfare office.	
e) Child leaving home (for any reason, e.g., custody change, emancipated, college, marriage)	
f) Paid the bills.	
g) Family schedule was <u>seriously disrupted for more than one day</u> because of something unexpected.	
h) Contact with a lawyer or the legal system.	
i) Childcare problems with babysitters, daycare center, etc., such as trouble with existing childcare or being unable to find childcare.	
j) Marriage in the immediate family	
k) Birth in the immediate family.	
l) Death in the immediate family.	
m) An unexpected repair was necessary for a major household item.	
n) Began a new school experience at a higher academic level (GED, college, graduate school, vocational, technical or professional school, or elementary school)	
o) Major change in living conditions (moved, remodeling, neighborhood change, home deterioration, lost mode of transportation)	
p) Fell behind in your rent or mortgage payments	
q) Unable to get medical care	
r) Was a victim of crime	
s) Fell behind in your gas, electric, water or phone bills	
t) Forced out of a job training program or education program	
u) Unable to pay for adequate transportation to get to work or school	
v) Had trouble paying a credit card balance	
w) Provided financial or other help to someone who is not living with you	

Process Evaluation Survey Questions

SECTION P: EMPLOYMENT

- P1. What is your current employment status
1. Full Time (30 or more hours per week at one job)
 2. Part Time (less than 30 hours per week at one job)
 3. More than one Part Time job (less than 30 hrs/week at each job)
 4. Currently in a job training program, or a student
 5. No regular work, but work on and off, or seasonal
 6. Do not work outside the home
 7. Currently unemployed
 8. No data
 9. Retired/Pension
 10. Workers Comp
 99. Refused

- P2. How many months were you employed during the last two years?
_____ Months
00 = No employment in the last two years.
99 = No data

- P3. If unemployed now, how long have you been unemployed?
_____ Months (**Go to FINANCIAL DATA below**)

If working, continue:

- P4. How long is your commute to work or school?
1. Half an hour or less
 2. Half an hour to an hour
 3. One to two hours
 4. More than two hours
- P5. How do you get to work or school?
1. Car
 2. Bus
 3. Train
 4. Bicycle
 5. Walk
 6. Other, specify _____
- P6. Do you have to pay for union dues, uniforms or cleaning of uniforms, or tools for your job?
1. Yes, Specify _____
 2. No

SECTION Q: FINANCIAL DATA

- Q1. How would you rate your own financial situation today? Would you say it is excellent, good, only fair or poor?
1. Excellent
 2. Good
 3. Only Fair

Process Evaluation Survey Questions

4. Poor
- Q2. Which of the following categories best characterizes your current household gross annual income **BEFORE** TAXES AND OTHER DEDUCTIONS?
- | | |
|----------------------|--------------------|
| 1. \$0 – 5,000 | 6. 40,001 – 50,000 |
| 2. 5,001 – 10,000 | 7. over 50,000 |
| 3. 10,001 – 20,000 | 8. Don't know |
| 4. 20,001 – 30,000 | 9. Refused |
| 5. 30,001 to 40,000. | |
- Q3. Which of the following categories best characterizes your current household net monthly income **AFTER** TAXES AND OTHER DEDUCTIONS?
- | | |
|--------------------|---|
| 1. \$0 – 500 | 6. 2,501 – 3,000 |
| 2. 500 – 1,000 | 7. over 3,000 |
| 3. 1,001 – 1,500 | 8. Don't know |
| 4. 1,501 – 2,000 | 9. Refused |
| 5. 2,001 to 2,500. | 10. Varies too much to say (go to Q4a.) |
- Q4. Over the past year, how much or how often has your monthly income varied?
1. Not at all/ almost never
 2. A little/occasionally or rarely
 3. Somewhat/sometimes (**Answer Q4a**)
 4. A lot/frequently or every month (**Answer Q4a**)

If answered #3 or #4, ask

Q4a. Why does your income vary? (*is it something within respondent's control, or outside like welfare changes etc.*)

- Q5. People include different things when they report income. There is no right or wrong way to report income. **Please indicate if you included any of the following in the household income you just reported.**

(Read: Mark all that apply)

1. Child support	2. Food stamps
3. TANF	4. General Assistance
5. Medicare/Medicaid	6. Unemployment compensation
7. Loans from family/friends	8. Gifts of money from family/friends
9. Section 8	10. Social Security Disability
11. Social Security Supplemental Security Income	12. Workers Compensation
13. Health Plan benefits	14. Special Grants
15. Pension	16. Other (specify):
17. Wages	18. None of these

Process Evaluation Survey Questions

Q6. Are you currently receiving any of these types of assistance?
(Read: Mark all that apply)

1. Food stamps	2. TANF
3. General Assistance	4. Medicare/Medicaid
5. Unemployment compensation	6. Loans from family/friends
7. Gifts of money from family or friends	8. Section 8
9. Social Security Disability	10. Social Security Supplemental Security Income
11. Workers Compensation	12. Health Plan benefits
13. Special Grants	14. Pension
15. Reduced or free school lunches	16. Other (specify):

Q7. In the last year, have you used other community resources for food, housing, or clothing etc.?

1.No community resources used	5. Food pantries
2. Soup kitchens	6. Emergency housing-shelters, etc.
3. Toys for tots or similar resource agency for toys	7. Sources for Free clothing
4. Free counseling	8. Other Social Services
9. Other (specify)	

Q8. During the past 12 months, did anyone living in your household have what you would consider to be a major change in income?

1. Yes (**Answer Q8a**)
2. No

Q8a. If yes: Did it go up or down? ___ Up ___ Down

Q8b. What caused the change? (*Positive or negative reasons; open ended*)

Q9. What are your major ongoing bills?

1. Food/groceries	7. Car repairs
2. Gasoline	8. Rent or mortgage
3. Nursing home care or care for dependant adult	9. College or technical/vocational school expenses
4. Car payments	10. Childcare
5. Credit cards	11. Other (specify)
6. Utilities (phone/electricity/gas/water)	

Q10. In the past 12 months, did you have any unexpected expenses that made it hard for you to pay your monthly bills?

1. Yes

Q10a. If yes What kind of expenses were they? (*open ended*)

2. No
3. Don't know

Process Evaluation Survey Questions

- Q11 In general, how do your finances usually work out at the end of the month? Do you feel that you usually end up with:
1. Some money left over at the end of the month
 2. Just enough money to make ends meet
 3. Not enough money to make ends meet
- Q12. I'd like to know what you think is the least amount of money a family of four can get by on in a year. \$_____ /year
- Q13 Compared with 5 years ago, do you think it is easier today or harder today for a person to start out poor, work hard, and to get out of poverty?
1. Easier
 2. Harder
 3. No opinion
 4. The same
- Q14. Now, thinking only about *you and your family*, are you better off financially, about the same, or worse off than five years ago?
1. Better off
 2. Somewhat better off
 3. About the same
 4. Somewhat worse off (**Answer Q14a**)
 5. Definitely worse off (**Answer Q14a**)
- If answer 4 or 5,**
Q14a. Why do you think you are worse off? What has happened?
- Q15. Which of the following do you think is most correct?
(*ROTATE and read all before respondent chooses*)
1. Right now, there are **many jobs available, but the pay isn't high enough** to cover ordinary costs of living and household bills.
 2. Right now, there are **not many jobs available and it is hard to find work** at all.
 3. Right now, there are **many jobs available, and the pay is high enough** to cover the ordinary costs of living and household bills.
- Q16. *Economically*, and thinking about all of *Philadelphia*, would you say Philadelphia is, compared to 5 years ago,
1. Much better off economically
 2. Somewhat better off economically
 3. About the same
 4. Somewhat worse off economically
 5. Much worse off economically

Process Evaluation Survey Questions

- Q17. Thinking about *jobs in Philadelphia*, how satisfied are you that there are enough good jobs in Philadelphia right now so that people who want to work can find a decent living?
1. Very satisfied
 2. Moderately satisfied
 3. Neutral
 4. A little dissatisfied (**Answer Q17a**)
 5. Very dissatisfied (**Answer Q17a**)
- If answer 4 or 5,**
Q17a, Why are you dissatisfied? What can you tell me about your experience with the job market in Philadelphia?
- Q18. In terms of the amount of money we as a country are spending on assistance to people with low incomes do you think we are spending too much, too little, or about the right amount?
1. Too much
 2. Too little
 3. About the right amount

SECTION R: PARTICIPANT DEMOGRAPHICS

Finally, our last section deals with information that will allow us to group your responses with others to compare the results.

- R1. In What Year Were You Born: _____ OR: How old are you? _____
___ **check if refused**
- R2. Are you the head of household?
1. Yes
 2. No
- R3. How many people are in your household? _____
- R5. What are their **ages**?
- | | |
|-------|-------------------------------|
| _____ | Infants or Toddlers (under 5) |
| _____ | School age (5 to 18) |
| _____ | Adults (over 18) |
| _____ | Senior Citizens (over 65) |
- R6. How many in your household are blood relatives?
_____ **# out of total in R3**
- R7. What ethnicity or culture do you most closely identify with? (*open ended*)
1. White/caucasian
 2. Black/African-American
 3. Hispanic
 4. Asian
 5. Other
 9. Refused
 99. No answer

Process Evaluation Survey Questions

- R8. Respondent's Sex: Female _____ Male _____
- R9. What's the highest educational level you completed? (*Don't read. Circle response. Probe if needed for specificity*):
1. 8th grade or less
 2. Some high school, but not graduated
 3. Specialized technical, business, clerical, or other training, not high school graduate
 4. GED or High school graduate or high school equivalency (not the same as GED) (Probe which one: _____)
 5. Specialized vocational, technical, business, clerical, or other training after high school
 6. Some College (Probe: _____) How much?
 7. College graduate: (Probe: _____) AA, BA, BS or the equivalent
 8. Post Graduate (Probe: _____) some courses or PhD
 99. Refused

SECTION S: FINAL QUESTIONS

- S1. This is the end of our survey. Is there anything else you have thought of that you would like us to know about your experience with any of PECO's programs or services?
- S2. Is there anything else you would like to tell us that will help us to learn more about what agencies could do that would help you and your family?

Thank you very much for your help today. We would like to give you \$25 for your time and help with our survey today.

Verify name and address to send the check.

Name:

Address:

Please note any information that you said you would send to them: