NEW YORK STATE
DEPARTMENT OF PUBLIC SERVICE

CASE 14-M-0565 – Proceeding on Motion of the Commission to Examine Programs to Address Energy Affordability for Low Income Utility Customers.

STAFF REPORT ON THE ENERGY AFFORDABILITY GUARANTEE PILOT

Dated: April 29, 2024

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Executive Summary

Achieving New York State energy and environmental policy objectives requires the simultaneous advancement of ensuring safe and reliable service, climate protection, and affordability for consumers. This requires the development of new policies, strategies, and programs that incentivize investments in cleaner and more energy efficient technologies from bulk system transmission and generation to end user consumer appliances. For the purposes of this Department of Public Service Staff (Staff) Report, those policies, strategies, and programs include those that support the conversion of fossil-fuel-based heating appliances to clean and energy efficient heat pump solutions, while maintaining consumer protections and affordability for the most vulnerable New Yorkers. The transition from fossil fuel-fired appliances to heat pumps for space and water heating presents benefits such as reduced emissions, improved air quality, and positive health outcomes. However, the electrification of homes may also result in near-term increased operating costs and higher energy burdens for many low-income households. The use of heat pumps in the low-income market segment is in its nascency, with limited insights available on the degree to which the operation of heat pumps for heating could potentially increase energy burdens for households. Energy affordability for lower-income households has been a long-standing policy priority for the Public Service Commission (Commission) and remains a threshold issue for Staff when considering electrification within this market segment. This Staff Report presents a proposal for administering an innovative pilot to fill important information gaps regarding the electrification of low-income households, while mitigating energy burden increases.

The Energy Affordability Guarantee Pilot (Pilot), directed by the Governor in 2023 and funded through the fiscal year 2024-25 State budget appropriation, provides Staff with an opportunity to support building electrification for lower-income New Yorkers, while gathering key insights on the costs to install and operate heat pumps across different customer and housing profiles, without risking the potential for increased energy costs for participants. The Pilot will provide an energy affordability guarantee (Guarantee) in the form of tailored bill assistance to approximately 1,000 low-income households that receive electrification upgrades through the New York State Energy Research and Development Authority's (NYSERDA) EmPower+ program to ensure that these households pay no more than six percent of their income towards electricity costs. To be eligible for the Guarantee, participants must have an annual household income equal to or lower than 60% of the State Median Income (SMI) and receive a heat pump through the EmPower+ program and agree to annual recertification of income eligibility.

The development of the Pilot requires four important considerations: (1) the methodology for determining the Guarantee level and a limit on electric consumption to be covered by the Guarantee, (2) the administrative process for utilities to provide the Guarantee, (3) participant eligibility and journey, and (4) the implementation and evaluation of the Pilot. The Pilot is projected to launch in the fall of 2024 and will require close coordination between Staff, the utilities, and NYSERDA. This Report outlines key considerations and Staff recommendations

for the design and implementation of the Pilot, which Staff expects will inform broader strategies to promote the decarbonization of the housing sector while prioritizing energy affordability and consumer protections for the most vulnerable New Yorkers.

I. Introduction

Governor Hochul's 2023 State of the State and the New York State Budget Appropriation for 2023 (Budget Law), charged the Department of Public Service (DPS) with the establishment of an energy affordability guarantee to support participants of the EmPower+ program that electrify their homes.[1] The 2023-2024 Budget Appropriation language provides:

> *The department shall also establish a program for such purpose to provide an energy affordability guarantee to participating residential customers in the EmPower Plus Program administered by the New York State Energy Research and Development Authority who electrify their homes in accordance with program standards required by the authority; provided, however, that the department is authorized to establish a cap on a residential customer's annual total electric usage by kilowatt hour applicable to the guarantee when establishing such program. The energy affordability guarantee shall provide that any participating residential customers in the EmPower Plus Program shall spend no more than six percent of household income on electric utility bills for the estimated useful life of the related electrification project. The energy affordability guarantee is to remain with the residence that participated in the Empower Plus Program and can transfer between tenants or owners through the electric corporation's application for service, provided however that the benefits of this program can only be transferred to eligible new tenants or owners.*[2]

The 2023-2024 Budget also included an appropriation of $200 million for the NYSERDA EmPower+ program to support the weatherization and electrification of up to 20,000 low-income households. The 2024-2025 Enacted Budget includes $50 million to fund the guarantee and administration of the Pilot.[3] Staff expects that the lessons learned in the first year of the Pilot would inform the development of a broader strategy for electrifying low- and moderate-income homes across New York State.

The Pilot is expected to fill important information gaps regarding the electrification of homes for low-income New Yorkers, while providing supplemental bill assistance to mitigate the possibility of higher electric bills for pilot participants. These insights will be critically

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[1] The electrification of homes primarily includes the conversion from a fossil-fuel based or electric resistance heating to heating with a heat pump. In addition, heat pumps provide a source of cooling for the home.

[2] Aid to Localities Appropriation, Chapter 53 of the Laws of 2023.

[3] Aid to Localities Appropriation, 2024-2025 Enacted Budget (awaiting chapter designation).

important, as New York State develops programs and policy to balance the need to decarbonize the housing sector, while prioritizing energy affordability and consumer protections. This Staff Report outlines key considerations and presents recommendations regarding the design and implementation of the Pilot for Commission consideration. Staff also expects to develop an implementation plan to document the key workstreams and associated milestones for the Pilot. This implementation plan would be updated as necessary, to reflect modifications that result from insights gained through the implementation of the Pilot.

II. Context

New York State has a robust set of clean energy and energy affordability policies and initiatives targeting income-eligible households, with nearly $1 billion invested annually to create access to clean energy solutions and to help low-income households pay their energy bills.[4] In addition, the Climate Leadership and Community Protection Act (CLCPA) sets goals for the State to significantly reduce greenhouse gas emissions across all sectors, and advances other important energy and environmental objectives. A key strategy for reducing emissions in the residential sector involves reducing the combustion of fossil-fuels by transitioning space and water heating from traditional fossil-fuel based appliances to heat pump solutions. However, there are barriers to the adoption of heat pumps for lower-income households, and the conversion to a heat pump can potentially increase the energy burden for some households when transitioning from a lower-cost heating fuel, such as natural gas.

A. Electrification for Low-Income Customers

The adoption of heat pumps can provide important benefits to residents, including improved air quality and health outcomes resulting from the removal of on-site fossil-fuel combustion, while also serving as an efficient source of cooling within the home. However, heat pump adoption for lower-income households can be challenging due to installation costs, the potential condition of the customer's home, and ongoing operating costs. Installation costs can exceed $15,000 for an air source heat pump in a 1-4 family home.[5] Additionally, many homes require weatherization improvements, such as insulation and air sealing to ensure that the heat

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[4] Through the Statewide Low-to Moderate-Income Portfolio, the utilities and NYSERDA collectively provide over $150 million annually to support Low- to Moderate-Income (LMI) clean energy programs in the residential and multifamily market segments; the Energy Affordability Program, administered by utilities, expends over $450 million annually to provides supplemental bill assistance to low-income customers; the Home Energy Assistance Program, administered by the NYS Office of Temporary and Disability Assistance (OTDA), expends over $300 million a year to provide bill payment assistance to low-income customers; the Weatherization Assistance Program, administered by NYS Homes and Community Renewal, provides over $70 million annually to weatherize low-income housing; and, through the Solar Energy Equity Framework, NYSERDA provides approximately $20 million a year to support access to community and roof-top solar for LMI residents.

[5] NYSERDA, New Efficiency: New York Analysis of Residential Heat Pump Potential and Economics (January 2019), available at: https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/Publications/PPSER/NYSERDA/18-44-HeatPump.pdf

pump can operate efficiently, which can exceed $10,000 per home.[6] Depending on the age of the home and the level of deferred maintenance, additional costs may be necessary before weatherization work and heat pumps can be installed. Addressing structural deficiencies, such as roof leaks or foundation issues, upgrading of electric wiring and panel boxes, and remediation of health and safety issues, also result in additional costs per project.[7]

Heat pump solutions displace traditional heating fuels such as natural gas and delivered fuels, including home heating oil and propane, and can provide space heating more efficiently than electric resistance heat. For homes heating with delivered fuel sources or electric resistance heat, studies have found that transitioning to a heat pump and weatherizing a home can reduce heating costs.[8] However, because heating via electricity is more costly than natural gas, homes that switch from a natural gas fired heating system may pay more to heat their home, even when the heat pump operates efficiently.[9] The variation in housing stock and existing Heating, Ventilation, and Air Conditioning (HVAC) configurations may also require heat pumps to be installed to supplement or partially displace existing heating systems in the home. In these scenarios, the household could potentially use the heat pump in conjunction with the existing heating system, which can result in higher overall costs to heat the home. Higher-income households may be in a better position to absorb higher heating costs and may decide to install a heat pump for reasons beyond reducing energy costs, such as for comfort within the home. However, increased energy costs for lower-income households can create hardships that can result in an inability to pay energy bills or the need to forego other necessities to pay their energy bill. Further, as the State advances its efforts to achieve the emission reductions required by the CLCPA, it is important to ensure that our most vulnerable customers are not left behind in the clean energy transition, ultimately remaining on legacy fuel systems longer than other customers due to their inability to finance the conversion of their heating and hot water systems.

The first year of the Pilot would provide more valuable data on the incremental cost of operating heat pumps and the overall impact on energy affordability, especially for low-income

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[6] The EmPower+ program has a project cost cap of $10,000 per home. See, NYSERDA's, EmPower+, available at: https://www.nyserda.ny.gov/All-Programs/EmPower-New-York-Program.

[7] In many cases, low-income energy efficiency programs must defer the weatherization of homes until structural deficiencies or health and safety issues can be remediated.

[8] Residential cold-climate Air Source Heat Pump Building Electrification Study, Cadmus, 2022, available at https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/Publications/PPSER/Program-Evaluation/Residential-ccASHP-Building-Electrification-StudyAugust-2022.pdf

[9] Replacing Fossil Fuel Heat with Mini-Split Heat Pumps in Urban Housing Stock, NYSERDA, 2022, available at https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/Publications/PPSER/Program-Evaluation/22-04-Replacing-Fossil-Fuel-Heat-with-Mini-Split-Heat-Pumps-in-Urban-House-Stock.pdf

households, since this data has been limited in the past.[10] The Pilot would also play an important role to advance an equitable clean energy transition and inform policy solutions and programs that can increase adoption of heat pump solutions for lower-income households while mitigating energy burden increases. Collecting and analyzing this data is vital, since energy affordability for lower-income and the most vulnerable New Yorkers is a long-standing policy priority for the Commission and remains a threshold issue for Staff when considering the electrification of this market segment.

B. Energy Affordability Program

In May 2016, the Commission established the foundational energy affordability policy that set the target energy burden at or below six percent of household income for all low-income households in New York State.[11] Low-income bill discount programs, commonly referred to as part of an Energy Affordability Program (EAP), were established at each of the large investor-owned electric and gas distribution utilities and the Long Island Power Authority (LIPA). The EAP provides monthly bill discounts for low-income customers in the form of bill credits that vary by income tier. In coordination with energy efficiency and weatherization programs, which can provide long-term energy burden reductions, the EAP is a critical tool for reducing energy burdens for the most vulnerable New Yorkers. In 2023, just over one million low-income households were enrolled in the EAP, with total expenditures, including LIPA, of over $450 million across New York State.[12]

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[10] In 2021, NYSERDA conducted a heat pump demonstration pilot with 400 low-to moderate-income households, focused on converting homes that heat with delivered fuels to heat pumps. NYSERDA also launched a pilot to explore heat pump solutions in affordable multifamily buildings, and there has been limited adoption of heat pump solutions in affordable multifamily housing through the New York State Clean Heat program, which is administered by utilities. Energy billing analyses have not been published for these demonstrations, as of the time of filing this Staff Report.

[11] Case 14-M-0565, Proceeding on the Motion Regarding Energy Affordability, Order Adopting Low Income Program Modifications and Directing Utility Filings (issued May 20, 2016), p. 3.

[12] Case 14-M-0565, Central Hudson Gas and Electric Corporation (Central Hudson) – Central Hudson Annual EAP Report Jan 2024 (filed February 5, 2024); Consolidated Edison Company of New York, Inc. (Con Edison) – Con Edison Annual EAP Report – December 2022 to November 2023 (filed January 2024); National Fuel Gas Distribution Corporation (National Fuel) – Annual EAP Report – 2023 (filed January 30, 2024); National Grid (Niagara Mohawk Power Corporation d/b/a National Grid, The Brooklyn Union Gas Company d/b/a National Grid NY [KEDNY], and Keyspan Gas East Corporation d/b/a National Grid [KEDLI]) – EAP Annual Report (filed January 31, 2024); New York State Electric and Gas Corporation (NYSEG) and Rochester Gas and Electric Corporation (RG&E) - NYSEG-RGE Annual Energy Affordability Policy Report (filed January 29,

C. EmPower+

EmPower+ provides no-cost energy efficiency and weatherization upgrades for low-income households (households with annual income at or below 60% of the State Median Income) and subsidizes energy efficiency and weatherization upgrades for moderate-income households (households with annual income at or below 80% of the State or Area Median Income, whichever is greater), residing in 1-4 family homes. The program is administered by NYSERDA and has been the primary ratepayer funded low-income energy efficiency program in New York State since 2005, with over 250,000 households receiving energy efficiency upgrades over this time. NYSERDA is currently administering a 2023-2024 Budget appropriation of $200 million to weatherize and electrify low-income households, in parallel with ratepayer funding, as well as funds made available through additional funding sources, such as the Home Energy Assistance Program (HEAP) and the Regional Greenhouse Gas Initiative (RGGI).

D. Energy Affordability Guarantee Subgroup

In August 2021, the Commission ordered Staff to establish a stakeholder Energy Affordability Policy Working Group to inform DPS' work on its Energy Affordability Policy.[13] In 2023, Staff established two separate sub-groups to discuss the program language contained in the 2023-2024 Budget, the Enhanced Energy Assistance Program and Energy Affordability Guarantee. The Energy Affordability Guarantee subgroup (Subgroup) was formed to provide input from stakeholders in the development of the Energy Affordability Guarantee. Participants in the Subgroup include Staff, representatives of not-for-profit energy related advocate organizations, NYSERDA, OTDA, the investor-owned electric and gas utilities, and LIPA. The Subgroup convened bi-weekly between August and November 2023 to discuss the considerations necessary to design and implement the Pilot to increase access to heat pump solutions for low-income customers, while providing necessary financial support to ensure household electric utility bills do not exceed six percent. The Subgroup discussions and recommendations were used to inform Staff's recommendations in this report.

III. Pilot Objectives

The Pilot will generate important insights on the electrification of low-income homes, while providing support to participants to mitigate the potential for increased energy burdens. Based on feedback from the Subgroup, Staff has identified the following primary objectives for the Pilot:

2024); and, Orange & Rockland Utilities, Inc. (O&R) – OR 2022-2023 Annual EAP Report – Final v2 (filed January 31, 2024).

[13] Case 14-M-0565, Order Adopting Energy Affordability Policy Modifications and Directing Utility Filings (issued August 12, 2021).

1) **Mitigate the potential for an increase in household energy burdens because of converting to a heat pump for space and water heating.** The provision of the Guarantee addresses a key component of the Pilot, to ensure that participants that fully electrify their home pay no more than six percent of their household income towards electricity bills. By supplementing the bill payment assistance provided through the EAP, the Guarantee allows Staff to take a "do no harm" approach to participant energy affordability, while creatively and flexibly implementing the Pilot.

2) **Create insights to drive a broader strategy for creating affordable access to heat pump solutions for lower income households.** The Pilot provides an opportunity for Staff to better understand cost considerations for program enrollees' decision whether to pursue full electrification, and following project completion will allow Staff to evaluate actual energy consumption and costs associated with residential heat pump operation. Staff would also be able to collect details on the electrification projects that are undertaken. Details on the level of necessary weatherization upgrades, non-energy investments such as health and safety or electric panel upgrades, and the associated costs will help to shed light on the breadth of upgrades that may be necessary to electrify a low-income household.

3) **Understand the options for determining customer-specific energy burdens and providing tailored bill discounts to customers to achieve energy burden reduction goals.** Given the potential for increased energy burdens associated with operating heat pumps, the design of the Pilot requires the monitoring of individual household energy consumption and monthly cost, determining customer-specific energy burdens, and providing bill discounts based upon each participant's energy burden. The EAP currently uses an average income and average energy consumption for low-income customers to calculate the energy burden and to provide the monthly discounts. Staff expects that the experience of determining customer-specific energy burdens, and calculating and providing tailored supplemental bill discounts will help Staff determine the potential transferability of this approach to the EAP.

IV. The Energy Affordability Guarantee

As articulated in the 2023-2024 Budget language, the Guarantee is intended to mitigate energy burden increases for low-income households that may result from the use of electrification technologies such as air sourced heat pumps (ASHP) for space heating. Specifically, participants "shall spend no more than six percent of household income on electric utility bills for the estimated useful life of the related electrification project."[14] For participants, the Guarantee would serve as an additional bill discount, if needed, to cover increased electricity usage associated with the operation of heat pumps in the home. The design of the Guarantee requires consideration for how the Guarantee is calculated and applied, the frequency that the

[14] Aid to Localities Appropriation, Chapter 53 of the Laws of 2023.

Guarantee's bill credits will be provided, the application of the limit on electricity consumption covered by the Guarantee to encourage energy-efficient behavior, and the duration of the Guarantee for participants. Participant specific energy consumption, costs, and household income would be required for each participant to calculate the participant's current energy burden and to develop a Guarantee level that can be tailored to meet the objective of keeping electric costs no more than six percent of household income for each participant.

At the time of Pilot planning, data on the electricity consumption associated with heating a home with an ASHP in New York State is limited, making it difficult to reliably predict if, and to what extent, monthly electricity bills will vary for a specific customer. NYSERDA published a study in June 2022, which included the direct metering of 19 ASHP projects. This study found an average annual increase in kilowatt hour (kWh) consumption of 5,067, or 422.25 kWh per month for households heating with an ASHP.[15] The metered increase in electricity consumption ranged from to 1,722 kWh to 11,595 kWh annually, highlighting the variability in ASHP consumption resulting from project-specific characteristics such as housing typology and geography, weatherization, customer usage behaviors, and energy efficiency updates. While sufficient data on electric consumption is not available to inform the design of the Pilot, Staff expects that the Pilot would help to fill existing knowledge gaps regarding ASHP electric consumption patterns for low-income households.

The Pilot will help address the lack of specificity on electric consumption trends associated with ASHP and advance the policy objective to ensure consumer protections and energy affordability for the most vulnerable New Yorkers. The Pilot will also provide Staff and utilities with experience in calculating energy burdens for each participant and tailoring a Guarantee level specific to their needs, which will inform possible changes to the EAP program in the future.[16]

A. Calculating the Guarantee

To mitigate the potential for Pilot participants to experience an increase in their energy burden, Staff would need to weigh the potential for electricity consumption and associated bills to vary over the course of the year, as heating and cooling needs fluctuate. Staff maintains that it is necessary to take a conservative approach to managing the energy burdens of participants given the vulnerability of lower-income customers to cost spikes. This requires that the

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[15] NYSERDA, Residential Cold Climate Air Source Heat Pump Building Electrification Study: NYSERDA-Specific Results (June 2022), available at: https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/Publications/PPSER/Program-Evaluation/ccASHPMetering-Study-SummaryMemo—August-2022.pdf

[16] This should not be interpreted to mean that Staff is proposing that the current EAP should be changed to a percentage of income payment plan (PIPP). However, it will provide information that will be useful in considering whether or not such a transition is feasible and could result in better outcomes in the EAP.

Guarantee level needed for each customer be calculated and provided monthly. There are several elements necessary to calculate the Guarantee level for participants, including the electricity consumption of the household and associated cost, the EAP benefit that the household receives, and the annual income of the household. Actual electricity usage and actual household bills are fundamental to calculating a household's energy burden. Participation in EAP is an important factor because the EAP provides customers with monthly bill discounts to help offset their utility costs. Consequently, Staff anticipates that most, if not all, Pilot participants will already be participating in EAP.[17] Household income would also be necessary to apply to the incurred electricity costs to determine household energy burdens and the Guarantee level for each Participant.

Guarantee levels for each participant would be determined as follows:

$$= (\text{Current Energy Burden} - \text{Target Energy Burden}) * \text{Monthly Income}$$

$$= \left(\frac{(\text{Monthly Electric Bill} - \text{Electric EAP Discount})}{\text{Monthly Income}} - 6\% \right) * \text{Monthly Income}$$

For example, if a participant has an annual household income of $40,000, a monthly electric bill of $252.45, and a monthly EAP discount of $37.45, the monthly Guarantee level would then be determined as follows:

$$= \left(\frac{(\$252.45 - \$37.45)}{\$3,333.33} - 6\% \right) * \$3,333.33$$

$$= \$15$$

In this case, the $15 would be applied as an incremental bill discount on the participant's electric bill.

While it would present an administrative burden to calculate specific energy burdens for a program as large as EAP due to the existing capabilities of current billing and customer management systems, the relatively small scale of the Pilot would allow for a more customized approach for assessing energy burdens and bill discount levels. Further, Staff proposes to contract with a third-party implementation contractor to centralize the administrative burden

[17] If a Pilot participant is not enrolled in EAP, they would be provided with an opportunity to enroll with their electric utility, upon successful application to the Pilot.

associated with calculating participant-specific energy burdens and discount levels. The role of the implementation contractor is discussed further in the Implementation section of this report.

Assessing and adjusting Guarantee levels with less frequency puts the participant at greater risk of having higher than expected electricity bills without additional bill assistance, potentially increasing customer arrears. Once there is a baseline of electricity consumption established for the household over two heating seasons, it may be possible to alter the frequency with which Guarantee levels are determined to further align participant expectations for monthly costs and operational efficiency of the Pilot, and to reduce administrative overhead.

Staff Recommendation

Staff recommends that the Guarantee level be calculated for each participant monthly for the first two years of the Pilot by applying the participant's target energy burden to the net monthly electric bill for the participant (monthly electric costs - monthly EAP credit). If a participant receives EAP and is identified as a gas or other heat customer, it is important that the EAP benefit be adjusted to reflect that the primary heating fuel of the home is electric.

Staff expects that after collecting and monitoring two years of billing data, it will be possible to establish a baseline to anticipate future electric consumption of the household. Following the first two years of the Pilot, Staff would assess the potential for reducing the frequency of calculating and applying the Guarantee level.

B. Establishing a Guarantee Limit

The Guarantee is intended to provide a security net for participants if the electricity consumption associated with operation of the ASHP results in electricity bills exceeding six percent for participants. The Guarantee is not intended to relieve customers from the responsibility of managing their monthly energy consumption and bills. To help encourage participants to continue to manage their electricity consumption following the installation of the heat pumps, the Budget authorizes the DPS to establish a "Guarantee limit" on a residential customer's annual total electric usage, by kWh, applicable to the Guarantee. The Guarantee limit would apply to the net cost associated with monthly kWh usage that is not already addressed by the EAP bill discounts provided, as outlined in Table 1, which outlines average monthly electricity usage, average monthly bills, and average monthly EAP credits provide to an electric customer of Niagara Mohawk Power Corporation (d/b/a National Grid).

Table 1: Average Monthly EAP Participant Electric Heat Bill

Electric Bill Details	kWh Usage	Bill ($)
Monthly Bill	741	$118.04
EAP Discount (Tier 3)	234.06	-$37.45
Net kWh (applicable to Guarantee)	478.81	$80.59

In considering the application of a limit, Staff is concerned about the balance between providing sufficient bill support to mitigate energy burden increases for participants, and establishing an upward limit on the amount of bill support that would be made available. In developing scenarios for the limit, Staff must utilize what data is available on ASHP consumption and energy bills for low-income customers. Using an average monthly consumption of 422.25 kWh per home to operate a heat pump,[18] average electric bills for homes that heat with electricity for each utility, and estimated household income,[19] Staff conducted sensitivity analyses to develop a kWh limit on the Guarantee that provides a sufficient bill subsidy to bring most households to a six percent energy burden. Tables 2 and 3 provide a summary of estimated energy burden for Consolidated Edison Company of New York, Inc. (Con Edison) electric heat customers receiving Tier 3 and Tier 1 EAP bill discounts in three different Guarantee limit scenarios: 100%, 125%, and 150% of the average consumption for low-income electric heat customers in Con Edison's service territory. Staff modeled these three limit scenarios to identify the likelihood that customers at different income levels would be able to reach the six percent electric energy burden goal of the Pilot following the conversion to ASHP for space heating, with an EAP credit and Guarantee. Staff modeled EAP Tier 3 and Tier 1 households because Tier 3 households are typically the most vulnerable, as they receive benefits from HEAP with two add-ons,[20] while there are more households assigned to Tier 1 EAP than

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[18] NYSERDA, Residential Cold Climate Air Source Heat Pump Building Electrification Study: NYSERDA-Specific Results (June 2022), available at: https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/Publications/PPSER/Program-Evaluation/ccASHPMetering-Study-SummaryMemo--August-2022.pdf

[19] Case 14-M-0565, Central Hudson Gas and Electric Corporation (Central Hudson) – Central Hudson EAP Workpapers 2023 (filed November 1, 2023); National Grid (Niagara Mohawk Power Corporation d/b/a National Grid, The Brooklyn Union Gas Company d/b/a National Grid NY [KEDNY], and Keyspan Gas East Corporation d/b/a National Grid [KEDLI]) – Annual EAP Discounts Update (filed November 1, 2023); New York State Electric and Gas Corporation (NYSEG) and Rochester Gas and Electric Corporation (RG&E) - 2023-10-31 NYSEG-RGE LI Discount Calculations Rate Plan Workbook (filed October 31, 2023); Orange & Rockland Utilities, Inc. (O&R) – Electric Low Income Discount Filing 110123 and Gas Low Income Discount Filing 110123 (filed November 1, 2023); Con Edison Low Income Statement No. 4 (electric) and LIC Statement 4 CECONY Gas (filed November 1, 2023); and National Fuel Gas Distribution Corporation (National Fuel) – NFGDC SLIP Discounts 12-01-2023 - Revised (filed November 27, 2023).

[20] The second and third tiers of the utility EAP are based on the receipt of either one or two add-ons to the customer's base HEAP benefit. The first add-on benefit is currently $41 for households with a gross income at or below 130 percent of the federal poverty level for the household size, or at least one adult household member receives ongoing assistance through Temporary Assistance, Supplemental Nutrition Assistance Program (SNAP), or "code A" Supplemental Security Income. The second add-on is currently $35 if the household includes a vulnerable individual (under the age of six, over the age of 60, or permanently disabled). A customer who receives one add-on is placed in Tier 2 of the utility's EAP and in Tier 3 if both add-ons are received.

any other Tiers. The tables provide an estimated energy burden, the dollar amount by which the participant would be over the six percent energy burden target, and the dollar amount by which the participant's electric bill would be under the limit. A summary for each utility is available in the Appendix.

Table 2: Con Edison Electric Customer-Tier 3 EAP, Electric Heat[21]

Annual HH Income	100%			125%			150%		
	Energy Burden[22]	$ Over EB Target[23]	$ Under Limit[24]	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
Monthly Consumption of 1,093 kWh									
$10,000	6.0%	$0.00	$7.65	6.0%	$0.00	$66.37	6.0%	$0.00	$125.08
$20,000	6.0%	$0.00	$57.65	6.0%	$0.00	$116.37	6.0%	$0.00	$175.08
$30,000	6.0%	$0.00	$107.65	6.0%	$0.00	$166.37	6.0%	$0.00	$225.08
$40,000	6.0%	$0.00	$157.65	6.0%	$0.00	$216.37	6.0%	$0.00	$275.08
Monthly Consumption of 1,500 kWh									
$10,000	22.2%	$134.71	$0.00	15.12%	$76.00	$0.00	8.1%	$17.29	$0.00
$20,000	11.1%	$84.71	$0.00	7.6%	$26.00	$0.00	6.0%	$0.00	$32.72
$30,000	7.4%	$34.71	$0.00	6.0%	$0.00	$24.00	6.0%	$0.00	$82.72
$40,000	6.0%	$0.00	$15.29	6.0%	$0.00	$74.00	6.0%	$0.00	$132.72
Monthly Consumption of 2,000 kWh									
$10,000	43.2%	$309.71	$0.00	36.1%	$251.00	$0.00	29.1%	$192.29	$0.00
$20,000	21.6%	$259.71	$0.00	18.1%	$201.00	$0.00	14.5%	$142.29	$0.00
$30,000	14.4%	$209.71	$0.00	12.0%	$151.00	$0.00	9.7%	$92.29	$0.00
$40,000	10.8%	$159.71	$0.00	9.0%	$101.00	$0.00	7.3%	$42.29	$0.00

[21] Assumes 422.25 kWh incremental ASHP consumption per customer (from NYSERDA June 2022 Study), and EAP Tier 3 credits for electric heat customers. Since most households heat with a natural gas or a delivered fuel, it is expected that majority of participants would be converting from non-electric heat, and for those that do heat with electricity, it is expected that heating with an ASHP would be more efficient.

[22] The Energy Burden column represents the estimated household energy burden after application of the Guarantee.

[23] The $ Over EB Target column represents the estimated portion of the customer's electric bill that exceeds the six percent energy burden target.

[24] The $ Under the Limit column represents the balance of the Guarantee that would not be necessary for the household to achieve a six percent energy burden, based on the size of the limit for the amount of electricity consumed that would be applicable to the Guarantee.

Table 2: Con Edison Electric Customer- Tier 1 EAP, Electric Heat[25]

Annual HH Income	100%			125%			150%		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
Monthly Consumption of 1,093 kWh									
$10,000	12.6%	$55.41	$0.00	6.0%	$0.00	$3.31	6.0%	$0.00	$62.02
$20,000	6.3%	$5.41	$0.00	6.0%	$0.00	$53.31	6.0%	$0.00	$112.02
$30,000	6.0%	$0.00	$44.59	6.0%	$0.00	$103.31	6.0%	$0.00	$162.02
$40,000	6.0%	$0.00	$94.59	6.0%	$0.00	$153.31	6.0%	$0.00	$212.02
Monthly Consumption of 1,500 kWh									
$10,000	29.7%	$197.77	$0.00	22.69%	$139.06	$0.00	15.6%	$80.35	$0.00
$20,000	14.9%	$147.77	$0.00	11.3%	$89.06	$0.00	7.8%	$30.35	$0.00
$30,000	9.9%	$97.77	$0.00	7.6%	$39.06	$0.00	6.0%	$0.00	$19.66
$40,000	7.4%	$47.77	$0.00	6.0%	$0.00	$10.94	6.0%	$0.00	$69.66
Monthly Consumption of 2,000 kWh									
$10,000	50.7%	$372.77	$0.00	43.7%	$314.06	$0.00	36.6%	$255.35	$0.00
$20,000	25.4%	$322.77	$0.00	21.8%	$264.06	$0.00	18.3%	$205.35	$0.00
$30,000	16.9%	$272.77	$0.00	14.6%	$214.06	$0.00	12.2%	$155.35	$0.00
$40,000	12.7%	$222.77	$0.00	10.9%	$164.06	$0.00	9.2%	$105.35	$0.00

As illustrated in the tables above, the Guarantee limit scenario that has the highest proportion of households able to reach the six percent energy burden target through a combination of their current EAP bill discount and the Guarantee provided is the 150% limit scenario. As household income increases, the level of Guarantee needed reduces, as illustrated in the tables above. For a household with a $40,000 annual income receiving a Tier 1 EAP credit in Con Edison territory with a monthly consumption of 1,093 kWh, the monthly electric bill would be $382.86, and the customer would receive an EAP credit of $42.38, leaving a net electric bill of $340.48. The target energy burden for this household would be $200 for the month. The Guarantee limit would be set at $352.48, as this represents 150% of the average monthly consumption for low-income customers in Con Edison's territory. The Guarantee provided would be the difference of the $340.48 that is the monthly electricity bill net the monthly EAP credit, and the energy burden target of $200, or $140.48 for the month. Table 4 provides a breakdown of the electric costs, bill discounts, and the net bill that would be paid by

[25] This table assumes a 422.25 kWh incremental ASHP consumption per customer (from NYSERDA June 2022 Study), and EAP Tier 1 credits for electric heat customers. Because most households heat with a natural gas or a delivered fuel, it is expected that majority of participants would be converting from non-electric heat, and for those that do heat with electricity, it is expected that heating with an ASHP would be more efficient.

the customer, based on a 150% Guarantee limit for a Tier 1 EAP customer, in Con Edison territory.

Table 4: Summary of Monthly Electric Billing Detail for Con Edison -Tier 1 EAP Customer[26]

Bill Component	**kWh**	**Bill ($)**
Usage with Heat Pump (assumes 1,093kWh)	1,093	$382.86
EAP Discount (Tier 1)	121	$42.38
Net bill kWh (applicable to Guarantee)	972.23	$340.48
Six Percent Energy Burden Goal	499.7	$200.00
Guarantee Limit	1,006.5	$352.48
Guarantee Provided	472.5	$140.48
Balance of Bill to be Paid by Customer	**499.7**	**$200.00**

Even with the Guarantee limit set at 150% of the average low-income energy consumption, there may be some households that are not able to reach the six percent energy burden target. The figures presented in Tables 2 and 3 should be considered informative of expected outcome, but not definitive, since the tracking of individual consumers'/households' energy burdens and monthly electric consumption is required to truly understand the impact of ASHP operation on household energy bills. In the interest of protecting vulnerable residents therefore, Staff would monitor actual electricity consumption and cost for participants and would consider adjustments to the Guarantee limit if actual electricity consumption exceeds the established limit during the heating season (November through March).

Further, because it might be difficult to isolate the electricity consumption associated with the ASHP from the total household electric consumption, Staff also proposes the installation of an energy monitor at the participant's electricity panel that allows for electricity consumption for individual circuits on the electric panel to be monitored. The inclusion of a monitor with the ASHP can identify the amount of kWh that the heat pump is drawing, which will help to further refine the Guarantee level and limit following the establishment of baseline consumption data for each participant. Any adjustments to the limit would be outlined in updates to the Pilot implementation plan, which would be filed prior to commencement of Pilot activities. Over the first two years of the Pilot, Staff would assess the monthly variability in electricity consumption and cost for participants and file an updated Pilot implementation plan, outlining the approach that will be taken to calculate the Guarantee level for the balance of the Pilot.

[26] This table assumes $35,000 in household income, and a $.35/kWh electric charge.

Staff Recommendation

Staff recommends that the Guarantee limit, or the kWh consumption that the Guarantee would cover, be established at 150% of the average consumption for low-income customers in each utility territory. Staff believes that a Guarantee limit is warranted to help ensure that customers continue to monitor their electricity consumption in their home, and that the 150% figure is a good compromise between disincentivizing unnecessary overuse and unnecessarily high pilot costs and protecting consumers from potentially higher energy burdens and a misalignment between the Guarantee limit and actual usage. Because the limit would be set based on estimates, Staff would monitor monthly energy burdens and consumption for participants. If trends develop that indicate that the operation of the ASHP results in higher-than-expected costs, Staff will reassess the Guarantee limit and make modifications. In addition, Staff recommends including a home energy monitor capable of monitoring specific circuits in all projects, so that electric consumption specific to the operation of the ASHP can be monitored to inform the Guarantee and limit levels.

C. Providing the Guarantee

The nature of the Pilot requires the ability to provide a Guarantee that helps participants keep their electric bills at six percent of their household income, which creates the need for a more individually tailored approach to providing bill credits than the current design of the EAP allows for. Staff seeks to avoid the need in this Pilot for increased administrative burdens and potentially costly modifications to utility billing systems at the expense of ratepayers. However, the relatively small scale of this Pilot lends itself to an administrative model that can be more nuanced and flexible than larger initiatives.

For the reasons discussed above, Staff believes that the Guarantee should be provided as a monthly credit to the participants' electricity bills by their electric utility, for the first two years of the Pilot. This approach would require a manual process, comparable to the process used by utilities to apply community distributed generation (CDG) credits on participating customers' bills before the process was automated by some companies. However, Staff anticipates that the use of an implementation contractor to manage the administrative burden associated with calculating the monthly Guarantee level and then communicating that back to the utilities will reduce the administrative burden on utilities and mitigate the need for utility system billing modifications. Further, the size of the Pilot will result in a manageable number of customers that require manual bill crediting for each utility.

The calculation of the Guarantee necessary each month would need to be based on monthly billing information, and the timing of calculating and providing the Guarantee credit is important so that customers know what portion of the bill they are responsible for paying and have sufficient time to pay it. Consequently, utilities would need to file updated tariffs to implement the program and be able to credit participants with the Guarantee. For customers on a

budget billing plan,[27] additional consideration should be given to provide the Guarantee as a true-up at least as often as the relevant utility trues up its budget billing customers' accounts, or no later than the end of the budget billing cycle, to avoid disruption to the budget billing plan. Given the variability in the process and timing that each utility company has for truing up the account for budget bill customers, a uniform approach for providing the Guarantee for budget bill customers may not be possible. Given the variability in how each utility company handles true ups, Staff would need to work with utilities on a process for truing up the account for budget billing customers.

Staff Recommendation

The utility companies should develop a process to manually apply the Guarantee to participants' bills monthly, to avoid the need for significant billing systems modifications. The utilities and Staff would need to work with the implementation contractor to develop a process for communicating monthly electricity consumption and charges in an expedient manner. In addition, Staff would work with each utility on a process to provide the Guarantee for customers that are on budget billing programs. Utilities would need to file tariff amendments accordingly.

D. Transferability of the Guarantee

The Budget Law allows for the Guarantee to be transferred to eligible new tenants or homeowners that are low-income if a participant moves from the residence that was served through EmPower+, or if the residence is sold sometime after receiving services through EmPower+. Pilot eligibility is further discussed in Section V; however, Staff anticipates that the primary reason that the Guarantee may not transfer when tenancy changes is that the new tenant or owner may not be income eligible.

Staff Recommendation

The Pilot should include a provision for when tenancy changes, so the new homeowner or tenant is made aware of the potential for participation in the Pilot and can submit an application to determine eligibility. This would require Pilot participants to inform their utility or the Pilot implementation contractor if they move, and/or building owners to inform the utility when their tenants move.

E. Guarantee Duration

The length of time that the Guarantee is provided to participants would depend on two factors: the estimated useful life (EUL) of the HVAC installed for the project (*e.g.*, an ASHP), and the amount of time that the participant remains eligible to participate in the Pilot. The

[27] A budget billing plan uses a customer's energy use over the past 12 months to establish a monthly charge. The customer's energy consumption is periodically reviewed, and the monthly charge can either increase or decrease based on actual usage, and any changes in energy costs. At the end of the year, there is a true up period where any difference in actual consumption and what the customer was charged will be rolled into a future calculation of the billing plan.

Budget Law sets an expectation that the Guarantee would be provided for the EUL of the heat pump. To establish the EUL of the heat pump, Staff can reference the Technical Resource Manual (TRM), which provides standardized energy savings calculations and assumptions for estimating energy and demand savings for New York ratepayer-funded programs.[28] Appendix P of the TRM provides an EUL of 15 years for residential air source heat pumps.[29]

In addition to the EUL of the heat pump, the duration of the Guarantee can be affected by housing instability of Pilot participants, as appears to have been contemplated in the Budget language. This may occur when there is a change in tenancy at the residence that was served through EmPower+ and the new tenant is determined not to be income eligible for the pilot, as discussed below. Additionally, if a participant, whether or not they have moved from the EmPower+ serviced residence, no longer meets Pilot eligibility criteria including household income eligibility, as discussed in Section V, the provision of the Guarantee would be suspended until or unless the tenant regains eligibility before the ASHP usable life is exceeded.

Staff Recommendation

To align with the EUL established in the TRM, Staff recommends that the Guarantee be provided to participants for 15 years, except where a participant leaves the Pilot because they move out of the home or apartment into a non-qualifying housing situation, or their income eligibility status changes. In the event a participant moves out of a specific apartment/home, the new occupant would have the ability to apply for the Pilot and assume receipt of the Guarantee for the balance of the 15 years, if they are determined to be income eligible for the Pilot.

V. Pilot Design

The Pilot design must remain flexible over the short term because ASHP usage and operational cost information for low-income households is relatively unknown. Once actual usage and cost data is understood, Staff would assess the potential to make any necessary adjustments to the Guarantee benefit levels, the Guarantee limit, and the frequency of providing the Guarantee to ensure the Guarantee is aligned with actual electricity consumption. Following the first two years of the Pilot, Staff would explore opportunities for aligning Pilot assumptions and activities with the EAP to build cost and process efficiencies between these efforts. Beyond the design of the Guarantee, the development of the Pilot requires consideration for implementation timelines, participant household and income eligibility, the implementation model used, pilot size, participant enrollment, and outreach and education.

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[28] New York State Joint Utilities, New York Standard Approach for Estimating Energy Savings from Energy Efficiency Programs – Residential, Multi-Family, and Commercial/Industrial (effective January 1, 2024), available at: https://dps.ny.gov/system/files/documents/2023/12/nys-trm-v11_filing.pdf.

[29] Id., p. 1392.

A. Timeline and Stages

The initiative would span 15 years for many participants, however there are two primary stages of participation:

> **Stage 1: Enrollment and Data Collection**. This stage covers the first two years of the Pilot, where important insights on the electricity use characteristics and costs would be collected. It is expected that all participants would be enrolled within the first year of the Pilot and would have two heating and two cooling seasons to establish their electric consumption trends and associated costs. Following the first two years, data on heat pump operating costs and the impact on participant's energy burden would be summarized and reported. In addition, Staff would conduct an impact and process evaluation to validate the findings and assess the implementation model after Stage 1.
>
> **Stage 2: Energy Burden Maintenance**. This stage would span the duration of the Pilot after the first two data collection years and is expected to last approximately 13 years. This stage would feature annual eligibility recertifications for participants and the continued provision of the Guarantee to those participants. Based on findings from Stage 1 of the Pilot, Staff may modify the approach to calculating and providing the Guarantee, including the potential for incorporation of the bill supports provided by the Guarantee into a future model of the EAP. Any potential changes would be outlined in an updated Implementation Plan.

During the second stage of the Pilot, Staff will also assess the overall outcome for participants in the Pilot and the potential that these learnings may be transferable to the broader market to inform future policies, strategies, and programs to support the electrification of lower-income households.

B. Participant Eligibility

The Budget Law identifies some minimum eligibility requirements for the Pilot including the fact that participants must: (1) be low income and (2) have an electrified work scope through EmPower+.[30] The Budget Law also allows for participants to be homeowners or renters. In addition to these income and household eligibility requirements, the Subgroup also raised several considerations during meetings, including whether participants can be enrolled in budget billing, have arrears attributed to their electric account, be in a deferred payment agreement (DPA), should be enrolled in EAP, or live in multifamily buildings. Given the potential that the benefits associated with the Pilot could last for 15 years, the Subgroup also questioned how to ensure that participants remain income eligible for the duration of Pilot.

[30] For purposes of aligning with EmPower+ and EAP eligibility, households need to have an annual income at or below 60% of the State Median Income to be considered low-income.

Staff suggests that enrollment in budget billing, having residential electric arrears, or participating in a DPA should not preclude households from participating in the Pilot. The affordability tools offered by the utilities, such as budget billing and DPAs are intended to help households manage their energy costs and pay down outstanding balances on their electricity bills. These measures are not designed to be punitive or to block EAP participants from enrolling in or receiving other applicable benefits programs and should not preclude participation in the Pilot.

Another reason households in arrears, or in DPAs or budget billing should not be precluded from the Pilot is that in addition to mitigating energy burden increases associated with using ASHPs, the Pilot is intended to help further educate and inform Staff as to how the use of ASHP can affect different types of residential customers. Staff also believes that customers in arrears should not be disqualified from participating in the Pilot solely because their account may be in arrears. Helping to manage electric costs associated with ASHP use may lend to allowing customers that are in arrears to continue making payments to reduce the amount in arrears over time. Furthermore, information gathered through the Pilot on different energy consumption and bill payment profiles would enhance our collective understanding of ASHP usage in this market segment.

The Subgroup discussed the importance of ensuring income eligibility of residential customers over the duration of the program. Household income can change from year to year, and it is possible that a household that was income-eligible for the Pilot one year, may no longer be income-eligible several years later. Staff recommends that Program participants undergo annual recertification through the implementation contractor to address the potential for income eligibility to vary over time. The participant's actual documented household income would be required each year to establish eligibility or recertification, as well as to calculate the household's energy burden and the Guarantee level. If a participant is determined to be ineligible in a given year, the Guarantee would be suspended, and the participant would not receive the Guarantee. However, if the participant becomes income-eligible again, the provision of the Guarantee would resume. If a participant is determined to be ineligible in a given year and has reason to believe that the determination is made in error, the participant should receive sufficient process to enable an additional review of income documentation to confirm eligibility. If a participant is not currently enrolled in EAP, they would be enrolled as part of the Pilot to ensure that they are receiving all of the bill payment support that they are eligible for. Where applicable and necessary and convenient, the implementation contractor may also be tasked with determining benefits layering for individuals/households enrolled in the Pilot.

The Subgroup discussed the eligibility of tenants of multifamily buildings as a way to ensure equity in access to Pilot participation. While not explicit, the requirement that the participant receives services through EmPower+ establishes that participants cannot live in a multifamily building larger than a 2-4 family home (i.e., a non-commercial structure) at this time, as this is an eligibility requirement for EmPower+. In addition, the electrification of large

multifamily buildings may be a key part of meeting the State's decarbonization goals, but the process brings additional considerations such as overall project cost, the dynamic of the cost shift between building owners and tenants, and strategies to optimize the HVAC configuration, all of which raise challenges beyond the scope of this initial limited Pilot. Meanwhile, Staff is currently working with state entities such as NYS Homes and Community Renewal (HCR) and NYSERDA, and with utilities, to develop solutions to address the unique challenges to electrifying in affordable multifamily buildings.

Staff Recommendations:

Staff recommends the following seven eligibility criteria for the Pilot:

- the participant must be income eligible for services under EmPower+ by NYSERDA, and enrolled in that program;
- the participant must agree to an annual recertification to ensure that the participant remains income-eligible for the Guarantee;
- if a participant resides in a rental property and moves to a new housing situation, that dwelling must also be eligible for Empower+ services, or eligibility to receive the Guarantee would be suspended;
- for a tenant moving into a rental property that was previously occupied by a Pilot participant, the tenant must be determined to be income eligible to receive the Guarantee;
- if a participant is not enrolled in EAP at the time of enrollment in the Pilot, they must be enrolled to take part in the Pilot; and
- even if the participant is enrolled in budget billing, have a DPA, or has arrears, they are still eligible for the Guarantee if they meet the other six eligibility criteria.

C. Pilot Size and Geographic Distribution

As described above, low-income customers that receive weatherization services and convert to a heat pump through EmPower+ would be provided the Guarantee. NYSERDA estimates that approximately 1,000 households will ultimately be served with a scope of work that includes weatherization and a heat pump, and that all of these households would be eligible to participate in the Pilot. For planning purposes, Staff has estimated participation of 1,000 households; however the Pilot would accept participants until NYSERDA exhausts the $200 million State budget appropriation.

To maximize the utility of the Pilot, it is necessary to have a Statewide distribution of Pilot projects. The variability in electric rates, heating degree days, and in housing typology can result in different experiences and energy burden impacts for participants. Further, Staff sees value in having each utility gain experience working with and applying customer-specific discounts to identify potential improvements to the current approach of standard EAP discounts for customers by Tier. Staff would work with NYSERDA to ensure an equitable distribution of

Pilot participants, with representation in each of the investor-owned utility territories as well as LIPA, and in disadvantaged communities.[31]

D. Enrollment and Journey

There are two potential pathways for participation in the Pilot, as illustrated in Figure 1. The primary path to enrollment would be that participants are enrolled in EmPower+ and receive a work scope that includes an ASHP. EmPower+ income eligibility is set at 60% of the State Median Income annually.[32] Once a household is served through EmPower+, they would be provided with an application for the Pilot. Upon providing necessary documentation to the implementation contractor, such as consent for the utility to share energy consumption and billing information while protecting customer confidentiality, the participant would be enrolled into the Pilot and would begin receiving the Guarantee. As outlined previously, participants would receive the Guarantee for the useful life of the ASHP, which is estimated at 15 years. Participants must recertify annually to ensure that they remain income eligible. If a participant becomes ineligible based on an annual review of income during the recertification process, the Guarantee would be suspended until the participant regains income eligibility. In addition, if a participant moves from the home that was served through EmPower+, they would be removed from the Pilot.

A second path to participating in the Pilot involves a potential participant moving into a home that was previously electrified through EmPower+ and occupied by a Pilot participant. This participation path can occur in rental, as well as a home ownership scenario. The new occupant would need to submit an application to the implementation contractor and demonstrate income-eligibility for the Pilot.

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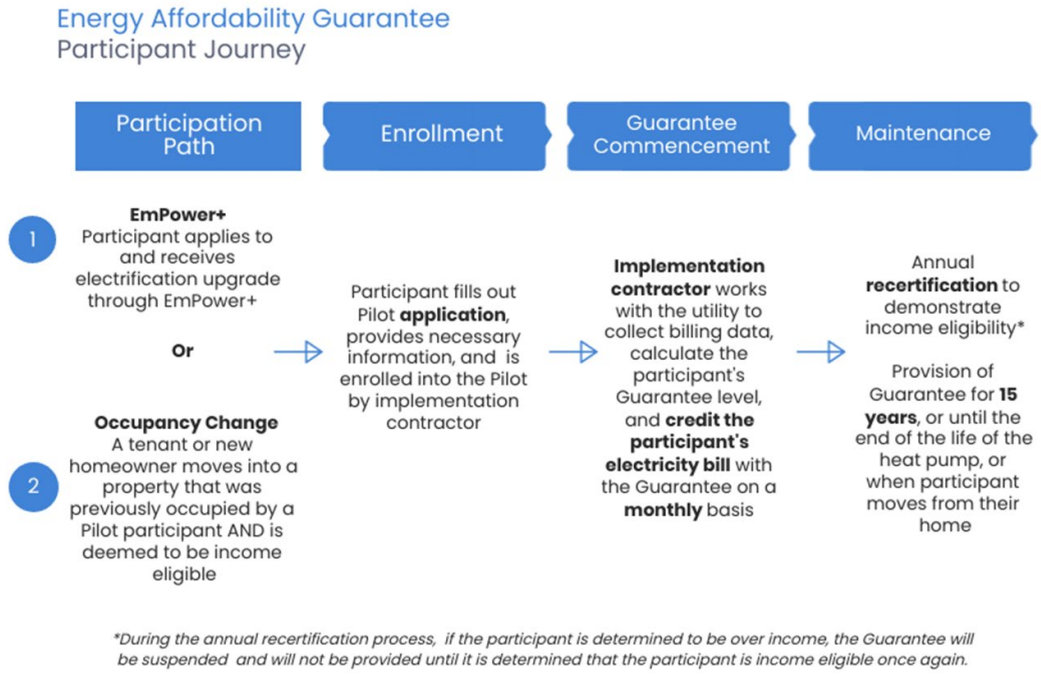
[31] As identified by the criteria established by the Climate Justice Working Group.

[32] In New York State, 60% of SMI for a household with four residents is $70,056. NYS OTDA publishes income limits for HEAP, based on 60% of SMI, online at: https://otda.ny.gov/programs/heap/.

Figure1: Participant Journey



E. Communication Materials

Staff seeks to ensure a positive experience for participants throughout the Pilot. To help set expectations for Pilot participation and to aid in the answering of questions from participants and interested parties, Staff envisions the need for clear communications and outreach and education documents, including but not limited to Frequently Asked Questions (FAQ) documents and talking points for Pilot participants, potential Pilot participants, contractors, and the public.

Staff Recommendations:

Staff recommends the development of communications materials including FAQs and talking points be developed and standardized across all utility territories.

VI. Pilot Implementation

Staff intends to arrive at an administratively efficient and nimble model that would allow for the implementation of the Pilot without requiring more than minor upgrades to utility billing software and procedures and customer management systems, with minor associated costs. However, the initial implementation model will not provide such outcomes without assistance from an implementation contractor that can handle the implementation process, and data collection and analysis, while providing Staff with the ability to adjust Pilot activities based on the experience of the participants.

A. Implementation Model

To streamline implementation, Staff recommends contracting with a third-party implementation contractor that would be responsible for working across the utilities and NYSERDA to implement the Pilot. The implementation contractor would be procured and managed by Staff. There are several workstreams that the implementation contractor would be responsible for:

- Participant intake: enrollment of participants into the Pilot, including documenting annual income from the participants and establishing the ability to collect monthly electricity consumption and cost from the utilities.
- Calculating annual energy burden and Guarantee levels for participants and communicating monthly Guarantee levels to the utilities.
- Monitoring of monthly electricity consumption and cost.
- Conducting annual recertification of participants.
- Providing customer service to participants, including answering participant questions.
- Handling communications between NYSERDA, the utilities, Pilot participants, and DPS.
- Providing monthly and annual reporting on Pilot details including electricity consumption, costs, and energy burdens for participants.

The single implementation contractor model would provide a level of administrative and cost efficiency compared to the potential of having redundant resourcing within each utility to manage these workstreams. Further, with approximately 1,000 participants, the size of the Pilot is conducive to using a variety of program management tools and resources. A single, centralized program management database would provide for cost efficiencies compared to the time and cost associated with requiring utility system modifications to support the Pilot.

B. Data Collection and Pilot Evaluation

The Pilot is expected to inform broader strategies for electrifying low-income households, and it will be important to assess the impact of the Pilot as well as the process used to develop and provide a participant-specific Guarantee. The impact of the Pilot with respect to mitigating energy burdens, incremental cost data, and experiences of customers based on geographic location will be pertinent to developing approaches for electrifying dwellings for low-income New Yorkers. As such, Staff expects to collect and report out on the following data points:

- Electric consumption and bills associated with operating ASHPs segmented by geography or utility territory, housing type, income band, and other participant characteristics;
- Shifts in energy burden for participants, initially and over time;
- Measures required in the electrification work scope, and associated costs; and

- Any impacts on participant arrears, enrollment in budget billing, and other affordability programs.

Further, the approach taken to estimate participant energy burdens and develop and apply a tailored bill discount would help to inform the future iterations of bill payment assistance programs. Staff would procure an independent contractor to evaluate the Pilot and summarize the findings.

C. Administrative Roles

The successful administration of the Pilot would require close collaboration amongst the primary program administrators, Staff, the utilities, and NYSERDA. With respect to specific administrative roles, Staff anticipates the following:

- DPS: overall management of the Pilot, including procurement of necessary implementation and evaluation support. The implementation contractor would be responsible for enrolling and interfacing with Pilot participants, collecting monthly electricity consumption data from utilities for each participant, and calculating monthly Guarantee levels for each participant.

- Utilities: coordination with DPS and the implementation contractor to provide access to monthly electricity consumption data, identifying when there are changes to participants status such as changing of a utility account or dropping from EAP participation, and answering questions from participants using Pilot communication materials, where necessary.

- NYSERDA: coordination with DPS and the implementation contractor to enroll EmPower+ participants into the Pilot, contribute to the collection of insights on the electrification of low-income households by providing detail on the EmPower+ projects, and answering any questions from participants using Pilot communications materials, where necessary.

D. Reporting

Staff would file status reports no less than every 6 months to provide transparency into Pilot activities and outcomes, including anonymized details on participation such as the number of participants, the range of monthly electricity consumption and costs for participants, and average Guarantee levels. Staff would also file annual reports to provide additional insights on the Pilot. Staff anticipate that the development of the quarterly and annual reports will rely primarily on data collected by the implementation contractor during the administration of the Pilot. Further, Staff would provide regular updates to the EAP Subgroup on progress, as the Pilot rolls out and as data and insights become available.

VII. Conclusion

Achieving New York State's climate and energy goals will require thoughtful strategies and policies to advance solutions to convert fossil fuel-fired heating systems to heat pump solutions for the most vulnerable New Yorkers. Staff views the Pilot as critical to fill existing information gaps on the potential that ASHPs might increase household energy burdens. The Pilot must also develop solutions and policies to mitigate cost increases for these households. The recommendations outlined herein present an approach intended to balance administrative burden and the desire to insulate participants from energy burden increases, while maintaining flexibility to adjust the Pilot design over time.

Specifically, Staff recommends that the Pilot design and implementation include:

- Eligibility based on participation in EmPower+ and annual recertification to confirm income eligibility.
- A provision for EAP customers to be enrolled in the EAP electric-heat category, if not already.
- Energy burden calculations and Guarantee levels that are tailored to each participant's actual household income and electric consumption.
- Monthly monitoring of electricity consumption and bills for participants.
- A Guarantee level based on the amount of bill discount necessary to bring the household's electric bill to six percent of their annual income, after accounting for any EAP discounts that the household is eligible for.
- A limit on electricity consumption that is covered by the Guarantee, based on 150% of average electric consumption for low-income customers in each utility territory.
- Regular review of energy burdens, Guarantee levels, and Guarantee limit to help identify instances where participants may have energy burdens exceeding six percent.
- The ability of Staff to adjust Guarantee calculations and limits, based on energy burden trends in the Pilot.
- Utilities providing monthly Guarantees in the form of bill credits to participants, which should be outlined in an amendment to each company's tariff.
- Consumer-facing materials be developed and standardized across utility territories to help ensure participants and other parties are informed of how the Pilot works.
- A Staff procured third-party implementation contractor to streamline the administration of the Pilot.

Staff also recommends that Pilot design and implementation details be included in a Pilot Implementation Plan, developed by Staff, and filed publicly. Any changes made to the Pilot design based on insights gained through the implementation of the Pilot would be documented in the Pilot Implementation Plan. The development and implementation of a pilot of this nature is new in the field of electrification, as well as for DPS. However, the approach

outlined herein, would help to inform the advancement of policy and programs to increase adoption of heat pump solutions for lower-income households, while keeping energy affordability in the forefront.

Appendix- Energy Burden and Guarantee Limit Analysis by Utility

The following tables provide sensitivity analyses by utility to identify at what income level households may be expected to have an income burden over six percent, the amount of dollars that the monthly bill is over the energy burden target of six percent, and the amount of dollars that the Guarantee provided would be under the Guarantee limit. The tables outline three scenarios, based on the Guarantee limit, or the amount of monthly kWh that the Guarantee would cover. The first scenario is based on setting the Guarantee limit at 100% of the average monthly kWh consumption for low-income customers with an electric heated home, in each utility territory. The analysis also includes scenarios of Guarantee limits set at 125% and 150% of average monthly kWh consumption for low-income customers with electric heat in each utility territory.

The analysis assumes 422.25 kWh incremental ASHP consumption per customer.[33] It is expected that majority of participants would be converting from non-electric heat, and for those that do heat with electricity, it is expected that heating with an ASHP would be more efficient. The analysis is provided for customers receiving EAP Tier 3 and EAP Tier 1 credits.

A.1 Sensitivity Analysis for Tier 3 EAP Customers with Electric Heat, by Utility

Central Hudson Electric Customer, Tier 3 EAP with Electric Heat

Monthly Consumption of 1,318 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	6.0%	$0.00	$33.00	6.0%	$0.00	$81.07	6.0%	$0.00	$129.14
$15,000	6.0%	$0.00	$58.00	6.0%	$0.00	$106.07	6.0%	$0.00	$154.14
$20,000	6.0%	$0.00	$83.00	6.0%	$0.00	$131.07	6.0%	$0.00	$179.14
$25,000	6.0%	$0.00	$108.00	6.0%	$0.00	$156.07	6.0%	$0.00	$204.14
$30,000	6.0%	$0.00	$133.00	6.0%	$0.00	$181.07	6.0%	$0.00	$229.14
$35,000	6.0%	$0.00	$158.00	6.0%	$0.00	$206.07	6.0%	$0.00	$254.14
$40,000	6.0%	$0.00	$183.00	6.0%	$0.00	$231.07	6.0%	$0.00	$279.14
$45,000	6.0%	$0.00	$208.00	6.0%	$0.00	$256.07	6.0%	$0.00	$304.14
$50,000	6.0%	$0.00	$233.00	6.0%	$0.00	$281.07	6.0%	$0.00	$329.14
$55,000	6.0%	$0.00	$258.00	6.0%	$0.00	$306.07	6.0%	$0.00	$354.14
$60,000	6.0%	$0.00	$283.00	6.0%	$0.00	$331.07	6.0%	$0.00	$379.14
$65,000	6.0%	$0.00	$308.00	6.0%	$0.00	$356.07	6.0%	$0.00	$404.14

[33] NYSERDA, Residential Cold Climate Air Source Heat Pump Building Electrification Study: NYSERDA-Specific Results (June 2022), available at: https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/Publications/PPSER/Program-Evaluation/ccASHPMetering-Study-SummaryMemo--August-2022.pdf

Monthly Consumption of 1,500 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	6.7%	$6.01	$0.00	6.00%	$0.00	$42.06	6.0%	$0.00	$90.13
$15,000	6.0%	$0.00	$18.99	6.0%	$0.00	$67.06	6.0%	$0.00	$115.13
$20,000	6.0%	$0.00	$43.99	6.0%	$0.00	$92.06	6.0%	$0.00	$140.13
$25,000	6.0%	$0.00	$68.99	6.0%	$0.00	$117.06	6.0%	$0.00	$165.13
$30,000	6.0%	$0.00	$93.99	6.0%	$0.00	$142.06	6.0%	$0.00	$190.13
$35,000	6.0%	$0.00	$118.99	6.0%	$0.00	$167.06	6.0%	$0.00	$215.13
$40,000	6.0%	$0.00	$143.99	6.0%	$0.00	$192.06	6.0%	$0.00	$240.13
$45,000	6.0%	$0.00	$168.99	6.0%	$0.00	$217.06	6.0%	$0.00	$265.13
$50,000	6.0%	$0.00	$193.99	6.0%	$0.00	$242.06	6.0%	$0.00	$290.13
$55,000	6.0%	$0.00	$218.99	6.0%	$0.00	$267.06	6.0%	$0.00	$315.13
$60,000	6.0%	$0.00	$243.99	6.0%	$0.00	$292.06	6.0%	$0.00	$340.13
$65,000	6.0%	$0.00	$268.99	6.0%	$0.00	$317.06	6.0%	$0.00	$365.13

Monthly Consumption of 2,000 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	19.6%	$113.31	$0.00	13.8%	$65.24	$0.00	8.1%	$17.17	$0.00
$15,000	13.1%	$88.31	$0.00	9.2%	$40.24	$0.00	6.0%	$0.00	$7.83
$20,000	9.8%	$63.31	$0.00	6.9%	$15.24	$0.00	6.0%	$0.00	$32.83
$25,000	7.8%	$38.31	$0.00	6.0%	$0.00	$9.76	6.0%	$0.00	$57.83
$30,000	6.5%	$13.31	$0.00	6.0%	$0.00	$34.76	6.0%	$0.00	$82.83
$35,000	6.0%	$0.00	$11.69	6.0%	$0.00	$59.76	6.0%	$0.00	$107.83
$40,000	6.0%	$0.00	$36.69	6.0%	$0.00	$84.76	6.0%	$0.00	$132.83
$45,000	6.0%	$0.00	$61.69	6.0%	$0.00	$109.76	6.0%	$0.00	$157.83
$50,000	6.0%	$0.00	$86.69	6.0%	$0.00	$134.76	6.0%	$0.00	$182.83
$55,000	6.0%	$0.00	$111.69	6.0%	$0.00	$159.76	6.0%	$0.00	$207.83
$60,000	6.0%	$0.00	$136.69	6.0%	$0.00	$184.76	6.0%	$0.00	$232.83
$65,000	6.0%	$0.00	$161.69	6.0%	$0.00	$209.76	6.0%	$0.00	$257.83

Monthly Consumption of 2,500 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	32.5%	$220.61	$0.00	26.7%	$172.54	$0.00	20.9%	$124.47	$0.00
$15,000	21.6%	$195.61	$0.00	17.8%	$147.54	$0.00	14.0%	$99.47	$0.00
$20,000	16.2%	$170.61	$0.00	13.4%	$122.54	$0.00	10.5%	$74.47	$0.00
$25,000	13.0%	$145.61	$0.00	10.7%	$97.54	$0.00	8.37%	$49.47	$0.00
$30,000	10.8%	$120.61	$0.00	8.9%	$72.54	$0.00	7.0%	$24.47	$0.00
$35,000	9.3%	$95.61	$0.00	7.6%	$47.54	$0.00	6.0%	$0.00	$0.53
$40,000	8.1%	$70.61	$0.00	6.7%	$22.54	$0.00	6.0%	$0.00	$25.53
$45,000	7.2%	$45.61	$0.00	6.0%	$0.00	$2.46	6.0%	$0.00	$50.53
$50,000	6.5%	$20.61	$0.00	6.0%	$0.00	$27.46	6.0%	$0.00	$75.53
$55,000	6.0%	$0.00	$4.39	6.0%	$0.00	$52.46	6.0%	$0.00	$100.53
$60,000	6.0%	$0.00	$29.39	6.0%	$0.00	$77.46	6.0%	$0.00	$125.53
$65,000	6.0%	$0.00	$54.39	6.0%	$0.00	$102.46	6.0%	$0.00	$150.53

Con Edison Electric Customer, Tier 3 EAP with Electric Heat

Monthly Consumption of 1,093 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	6.0%	$0.00	$7.65	6.0%	$0.00	$66.37	6.0%	$0.00	$125.08
$15,000	6.0%	$0.00	$32.65	6.0%	$0.00	$91.37	6.0%	$0.00	$150.08
$20,000	6.0%	$0.00	$57.65	6.0%	$0.00	$116.37	6.0%	$0.00	$175.08
$25,000	6.0%	$0.00	$82.65	6.0%	$0.00	$141.37	6.0%	$0.00	$200.08
$30,000	6.0%	$0.00	$107.65	6.0%	$0.00	$166.37	6.0%	$0.00	$225.08
$35,000	6.0%	$0.00	$132.65	6.0%	$0.00	$191.37	6.0%	$0.00	$250.08
$40,000	6.0%	$0.00	$157.65	6.0%	$0.00	$216.37	6.0%	$0.00	$275.08
$45,000	6.0%	$0.00	$182.65	6.0%	$0.00	$241.37	6.0%	$0.00	$300.08
$50,000	6.0%	$0.00	$207.65	6.0%	$0.00	$266.37	6.0%	$0.00	$325.08
$55,000	6.0%	$0.00	$232.65	6.0%	$0.00	$291.37	6.0%	$0.00	$350.08
$60,000	6.0%	$0.00	$257.65	6.0%	$0.00	$316.37	6.0%	$0.00	$375.08
$65,000	6.0%	$0.00	$282.65	6.0%	$0.00	$341.37	6.0%	$0.00	$400.08

Monthly Consumption of 1,500 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	22.2%	$134.71	$0.00	15.12%	$76.00	$0.00	8.1%	$17.29	$0.00
$15,000	14.8%	$109.71	$0.00	10.1%	$51.00	$0.00	6.0%	$0.00	$7.71
$20,000	11.1%	$84.71	$0.00	7.6%	$26.00	$0.00	6.0%	$0.00	$32.72
$25,000	8.9%	$59.71	$0.00	6.0%	$1.00	$0.00	6.0%	$0.00	$57.72
$30,000	7.4%	$34.71	$0.00	6.0%	$0.00	$24.00	6.0%	$0.00	$82.72
$35,000	6.3%	$9.71	$0.00	6.0%	$0.00	$49.00	6.0%	$0.00	$107.72
$40,000	6.0%	$0.00	$15.29	6.0%	$0.00	$74.00	6.0%	$0.00	$132.72
$45,000	6.0%	$0.00	$40.29	6.0%	$0.00	$99.00	6.0%	$0.00	$157.72
$50,000	6.0%	$0.00	$65.29	6.0%	$0.00	$124.00	6.0%	$0.00	$182.72
$55,000	6.0%	$0.00	$90.29	6.0%	$0.00	$149.00	6.0%	$0.00	$207.72
$60,000	6.0%	$0.00	$115.29	6.0%	$0.00	$174.00	6.0%	$0.00	$232.72
$65,000	6.0%	$0.00	$140.29	6.0%	$0.00	$199.00	6.0%	$0.00	$257.72

Monthly Consumption of 2,000 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	43.2%	$309.71	$0.00	36.1%	$251.00	$0.00	29.1%	$192.29	$0.00
$15,000	28.8%	$284.71	$0.00	24.1%	$226.00	$0.00	19.4%	$167.29	$0.00
$20,000	21.6%	$259.71	$0.00	18.1%	$201.00	$0.00	14.5%	$142.29	$0.00
$25,000	17.3%	$234.71	$0.00	14.4%	$176.00	$0.00	11.6%	$117.29	$0.00
$30,000	14.4%	$209.71	$0.00	12.0%	$151.00	$0.00	9.7%	$92.29	$0.00
$35,000	12.3%	$184.71	$0.00	10.3%	$126.00	$0.00	8.3%	$67.29	$0.00
$40,000	10.8%	$159.71	$0.00	9.0%	$101.00	$0.00	7.3%	$42.29	$0.00
$45,000	9.6%	$134.71	$0.00	8.0%	$76.00	$0.00	6.5%	$17.29	$0.00
$50,000	8.6%	$109.71	$0.00	7.2%	$51.00	$0.00	6.0%	$0.00	$7.72
$55,000	7.8%	$84.71	$0.00	6.6%	$26.00	$0.00	6.0%	$0.00	$32.72
$60,000	7.2%	$59.71	$0.00	6.0%	$1.00	$0.00	6.0%	$0.00	$57.72
$65,000	6.6%	$34.71	$0.00	6.0%	$0.00	$24.00	6.0%	$0.00	$82.72

Monthly Consumption of 2,500 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	64.2%	$484.71	$0.00	57.1%	$426.00	$0.00	50.1%	$367.29	$0.00
$15,000	42.8%	$459.71	$0.00	38.1%	$401.00	$0.00	33.4%	$342.29	$0.00
$20,000	32.1%	$434.71	$0.00	28.6%	$376.00	$0.00	25.0%	$317.29	$0.00
$25,000	25.7%	$409.71	$0.00	22.8%	$351.00	$0.00	20.03%	$292.29	$0.00
$30,000	21.4%	$384.71	$0.00	19.0%	$326.00	$0.00	16.7%	$267.29	$0.00
$35,000	18.3%	$359.71	$0.00	16.3%	$301.00	$0.00	14.3%	$242.29	$0.00
$40,000	16.0%	$334.71	$0.00	14.3%	$276.00	$0.00	12.5%	$217.29	$0.00
$45,000	14.3%	$309.71	$0.00	12.7%	$251.00	$0.00	11.1%	$192.29	$0.00
$50,000	12.8%	$284.71	$0.00	11.4%	$226.00	$0.00	10.0%	$167.29	$0.00
$55,000	11.7%	$259.71	$0.00	10.4%	$201.00	$0.00	9.1%	$142.29	$0.00
$60,000	10.7%	$234.71	$0.00	9.5%	$176.00	$0.00	8.3%	$117.29	$0.00
$65,000	9.9%	$209.71	$0.00	8.8%	$151.00	$0.00	7.7%	$92.29	$0.00

National Grid Electric Customer, Tier 3 EAP with Electric Heat

Monthly Consumption of 1,163 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	6.0%	$0.00	$16.38	6.0%	$0.00	$47.56	6.0%	$0.00	$78.74
$15,000	6.0%	$0.00	$41.38	6.0%	$0.00	$72.56	6.0%	$0.00	$103.74
$20,000	6.0%	$0.00	$66.38	6.0%	$0.00	$97.56	6.0%	$0.00	$128.74
$25,000	6.0%	$0.00	$91.38	6.0%	$0.00	$122.56	6.0%	$0.00	$153.74
$30,000	6.0%	$0.00	$116.38	6.0%	$0.00	$147.56	6.0%	$0.00	$178.74
$35,000	6.0%	$0.00	$141.38	6.0%	$0.00	$172.56	6.0%	$0.00	$203.74
$40,000	6.0%	$0.00	$166.38	6.0%	$0.00	$197.56	6.0%	$0.00	$228.74
$45,000	6.0%	$0.00	$191.38	6.0%	$0.00	$222.56	6.0%	$0.00	$253.74
$50,000	6.0%	$0.00	$216.38	6.0%	$0.00	$247.56	6.0%	$0.00	$278.74
$55,000	6.0%	$0.00	$241.38	6.0%	$0.00	$272.56	6.0%	$0.00	$303.74
$60,000	6.0%	$0.00	$266.38	6.0%	$0.00	$297.56	6.0%	$0.00	$328.74
$65,000	6.0%	$0.00	$291.38	6.0%	$0.00	$322.56	6.0%	$0.00	$353.74

Monthly Consumption of 1,500 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	10.8%	$40.30	$0.00	7.09%	$9.12	$0.00	6.0%	$0.00	$22.06
$15,000	7.2%	$15.30	$0.00	6.0%	$0.00	$15.88	6.0%	$0.00	$47.06
$20,000	6.0%	$0.00	$9.70	6.0%	$0.00	$40.88	6.0%	$0.00	$72.06
$25,000	6.0%	$0.00	$34.70	6.0%	$0.00	$65.88	6.0%	$0.00	$97.06
$30,000	6.0%	$0.00	$59.70	6.0%	$0.00	$90.88	6.0%	$0.00	$122.06
$35,000	6.0%	$0.00	$84.70	6.0%	$0.00	$115.88	6.0%	$0.00	$147.06
$40,000	6.0%	$0.00	$109.70	6.0%	$0.00	$140.88	6.0%	$0.00	$172.06
$45,000	6.0%	$0.00	$134.70	6.0%	$0.00	$165.88	6.0%	$0.00	$197.06
$50,000	6.0%	$0.00	$159.70	6.0%	$0.00	$190.88	6.0%	$0.00	$222.06
$55,000	6.0%	$0.00	$184.70	6.0%	$0.00	$215.88	6.0%	$0.00	$247.06
$60,000	6.0%	$0.00	$209.70	6.0%	$0.00	$240.88	6.0%	$0.00	$272.06
$65,000	6.0%	$0.00	$234.70	6.0%	$0.00	$265.88	6.0%	$0.00	$297.06

Monthly Consumption of 2,000 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	20.9%	$124.45	$0.00	17.2%	$93.27	$0.00	13.5%	$62.09	$0.00
$15,000	14.0%	$99.45	$0.00	11.5%	$68.27	$0.00	9.0%	$37.09	$0.00
$20,000	10.5%	$74.45	$0.00	8.6%	$43.27	$0.00	6.7%	$12.09	$0.00
$25,000	8.4%	$49.45	$0.00	6.9%	$18.27	$0.00	6.0%	$0.00	$12.91
$30,000	7.0%	$24.45	$0.00	6.0%	$0.00	$6.73	6.0%	$0.00	$37.91
$35,000	6.0%	$0.00	$0.55	6.0%	$0.00	$31.73	6.0%	$0.00	$62.91
$40,000	6.0%	$0.00	$25.55	6.0%	$0.00	$56.73	6.0%	$0.00	$87.91
$45,000	6.0%	$0.00	$50.55	6.0%	$0.00	$81.73	6.0%	$0.00	$112.91
$50,000	6.0%	$0.00	$75.55	6.0%	$0.00	$106.73	6.0%	$0.00	$137.91
$55,000	6.0%	$0.00	$100.55	6.0%	$0.00	$131.73	6.0%	$0.00	$162.91
$60,000	6.0%	$0.00	$125.55	6.0%	$0.00	$156.73	6.0%	$0.00	$187.91
$65,000	6.0%	$0.00	$150.55	6.0%	$0.00	$181.73	6.0%	$0.00	$212.91

Monthly Consumption of 2,500 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	31.0%	$208.61	$0.00	27.3%	$177.43	$0.00	23.5%	$146.25	$0.00
$15,000	20.7%	$183.61	$0.00	18.2%	$152.43	$0.00	15.7%	$121.25	$0.00
$20,000	15.5%	$158.61	$0.00	13.6%	$127.43	$0.00	11.8%	$96.25	$0.00
$25,000	12.4%	$133.61	$0.00	10.9%	$102.43	$0.00	9.42%	$71.25	$0.00
$30,000	10.3%	$108.61	$0.00	9.1%	$77.43	$0.00	7.8%	$46.25	$0.00
$35,000	8.9%	$83.61	$0.00	7.8%	$52.43	$0.00	6.7%	$21.25	$0.00
$40,000	7.8%	$58.61	$0.00	6.8%	$27.43	$0.00	6.0%	$0.00	$3.75
$45,000	6.9%	$33.61	$0.00	6.1%	$2.43	$0.00	6.0%	$0.00	$28.75
$50,000	6.2%	$8.61	$0.00	6.0%	$0.00	$22.57	6.0%	$0.00	$53.75
$55,000	6.0%	$0.00	$16.39	6.0%	$0.00	$47.57	6.0%	$0.00	$78.75
$60,000	6.0%	$0.00	$41.39	6.0%	$0.00	$72.57	6.0%	$0.00	$103.75
$65,000	6.0%	$0.00	$66.39	6.0%	$0.00	$97.57	6.0%	$0.00	$128.75

NYSEG Electric Customer, Tier 3 EAP with Electric Heat

Monthly Consumption of 1,430 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	6.0%	$0.00	$37.67	6.0%	$0.00	$75.61	6.0%	$0.00	$113.56
$15,000	6.0%	$0.00	$62.67	6.0%	$0.00	$100.61	6.0%	$0.00	$138.56
$20,000	6.0%	$0.00	$87.67	6.0%	$0.00	$125.61	6.0%	$0.00	$163.56
$25,000	6.0%	$0.00	$112.67	6.0%	$0.00	$150.61	6.0%	$0.00	$188.56
$30,000	6.0%	$0.00	$137.67	6.0%	$0.00	$175.61	6.0%	$0.00	$213.56
$35,000	6.0%	$0.00	$162.67	6.0%	$0.00	$200.61	6.0%	$0.00	$238.56
$40,000	6.0%	$0.00	$187.67	6.0%	$0.00	$225.61	6.0%	$0.00	$263.56
$45,000	6.0%	$0.00	$212.67	6.0%	$0.00	$250.61	6.0%	$0.00	$288.56
$50,000	6.0%	$0.00	$237.67	6.0%	$0.00	$275.61	6.0%	$0.00	$313.56
$55,000	6.0%	$0.00	$262.67	6.0%	$0.00	$300.61	6.0%	$0.00	$338.56
$60,000	6.0%	$0.00	$287.67	6.0%	$0.00	$325.61	6.0%	$0.00	$363.56
$65,000	6.0%	$0.00	$312.67	6.0%	$0.00	$350.61	6.0%	$0.00	$388.56

Monthly Consumption of 1,750 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	7.3%	$10.48	$0.00	6.0%	$0.00	$27.47	6.0%	$0.00	$65.41
$15,000	6.0%	$0.00	$14.52	6.0%	$0.00	$52.47	6.0%	$0.00	$90.41
$20,000	6.0%	$0.00	$39.52	6.0%	$0.00	$77.47	6.0%	$0.00	$115.41
$25,000	6.0%	$0.00	$64.52	6.0%	$0.00	$102.47	6.0%	$0.00	$140.41
$30,000	6.0%	$0.00	$89.52	6.0%	$0.00	$127.47	6.0%	$0.00	$165.41
$35,000	6.0%	$0.00	$114.52	6.0%	$0.00	$152.47	6.0%	$0.00	$190.41
$40,000	6.0%	$0.00	$139.52	6.0%	$0.00	$177.47	6.0%	$0.00	$215.41
$45,000	6.0%	$0.00	$164.52	6.0%	$0.00	$202.47	6.0%	$0.00	$240.41
$50,000	6.0%	$0.00	$189.52	6.0%	$0.00	$227.47	6.0%	$0.00	$265.41
$55,000	6.0%	$0.00	$214.52	6.0%	$0.00	$252.47	6.0%	$0.00	$290.41
$60,000	6.0%	$0.00	$239.52	6.0%	$0.00	$277.47	6.0%	$0.00	$315.41
$65,000	6.0%	$0.00	$264.52	6.0%	$0.00	$302.47	6.0%	$0.00	$340.41

Monthly Consumption of 2,000 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	11.8%	$48.13	$0.00	7.2%	$10.18	$0.00	6.0%	$0.00	$27.77
$15,000	7.9%	$23.13	$0.00	6.0%	$0.00	$14.82	6.0%	$0.00	$52.77
$20,000	6.0%	$0.00	$1.87	6.0%	$0.00	$39.82	6.0%	$0.00	$77.77
$25,000	6.0%	$0.00	$26.87	6.0%	$0.00	$64.82	6.0%	$0.00	$102.77
$30,000	6.0%	$0.00	$51.87	6.0%	$0.00	$89.82	6.0%	$0.00	$127.77
$35,000	6.0%	$0.00	$76.87	6.0%	$0.00	$114.82	6.0%	$0.00	$152.77
$40,000	6.0%	$0.00	$101.87	6.0%	$0.00	$139.82	6.0%	$0.00	$177.77
$45,000	6.0%	$0.00	$126.87	6.0%	$0.00	$164.82	6.0%	$0.00	$202.77
$50,000	6.0%	$0.00	$151.87	6.0%	$0.00	$189.82	6.0%	$0.00	$227.77
$55,000	6.0%	$0.00	$176.87	6.0%	$0.00	$214.82	6.0%	$0.00	$252.77
$60,000	6.0%	$0.00	$201.87	6.0%	$0.00	$239.82	6.0%	$0.00	$277.77
$65,000	6.0%	$0.00	$226.87	6.0%	$0.00	$264.82	6.0%	$0.00	$302.77

Monthly Consumption of 2,500 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	20.8%	$123.42	$0.00	16.3%	$85.47	$0.00	11.7%	$47.52	$0.00
$15,000	13.9%	$98.42	$0.00	10.8%	$60.47	$0.00	7.8%	$22.52	$0.00
$20,000	10.4%	$73.42	$0.00	8.1%	$35.47	$0.00	6.0%	$0.00	$2.48
$25,000	8.3%	$48.42	$0.00	6.5%	$10.47	$0.00	6.0%	$0.00	$27.48
$30,000	6.9%	$23.42	$0.00	6.0%	$0.00	$14.53	6.0%	$0.00	$52.48
$35,000	6.0%	$0.00	$1.58	6.0%	$0.00	$39.53	6.0%	$0.00	$77.48
$40,000	6.0%	$0.00	$26.58	6.0%	$0.00	$64.53	6.0%	$0.00	$102.48
$45,000	6.0%	$0.00	$51.58	6.0%	$0.00	$89.53	6.0%	$0.00	$127.48
$50,000	6.0%	$0.00	$76.58	6.0%	$0.00	$114.53	6.0%	$0.00	$152.48
$55,000	6.0%	$0.00	$101.58	6.0%	$0.00	$139.53	6.0%	$0.00	$177.48
$60,000	6.0%	$0.00	$126.58	6.0%	$0.00	$164.53	6.0%	$0.00	$202.48
$65,000	6.0%	$0.00	$151.58	6.0%	$0.00	$189.53	6.0%	$0.00	$227.48

O&R Electric Customer, Tier 3 EAP with Electric Heat

Monthly Consumption of 1,349 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	6.0%	$0.00	$46.13	6.0%	$0.00	$96.69	6.0%	$0.00	$147.25
$15,000	6.0%	$0.00	$71.13	6.0%	$0.00	$121.69	6.0%	$0.00	$172.25
$20,000	6.0%	$0.00	$96.13	6.0%	$0.00	$146.69	6.0%	$0.00	$197.25
$25,000	6.0%	$0.00	$121.13	6.0%	$0.00	$171.69	6.0%	$0.00	$222.25
$30,000	6.0%	$0.00	$146.13	6.0%	$0.00	$196.69	6.0%	$0.00	$247.25
$35,000	6.0%	$0.00	$171.13	6.0%	$0.00	$221.69	6.0%	$0.00	$272.25
$40,000	6.0%	$0.00	$196.13	6.0%	$0.00	$246.69	6.0%	$0.00	$297.25
$45,000	6.0%	$0.00	$221.13	6.0%	$0.00	$271.69	6.0%	$0.00	$322.25
$50,000	6.0%	$0.00	$246.13	6.0%	$0.00	$296.69	6.0%	$0.00	$347.25
$55,000	6.0%	$0.00	$271.13	6.0%	$0.00	$321.69	6.0%	$0.00	$372.25
$60,000	6.0%	$0.00	$296.13	6.0%	$0.00	$346.69	6.0%	$0.00	$397.25
$65,000	6.0%	$0.00	$321.13	6.0%	$0.00	$371.69	6.0%	$0.00	$422.25

Monthly Consumption of 1,750 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	11.0%	$41.30	$0.00	6.0%	$0.00	$9.26	6.0%	$0.00	$59.82
$15,000	7.3%	$16.30	$0.00	6.0%	$0.00	$34.26	6.0%	$0.00	$84.82
$20,000	6.0%	$0.00	$8.70	6.0%	$0.00	$59.26	6.0%	$0.00	$109.82
$25,000	6.0%	$0.00	$33.70	6.0%	$0.00	$84.26	6.0%	$0.00	$134.82
$30,000	6.0%	$0.00	$58.70	6.0%	$0.00	$109.26	6.0%	$0.00	$159.82
$35,000	6.0%	$0.00	$83.70	6.0%	$0.00	$134.26	6.0%	$0.00	$184.82
$40,000	6.0%	$0.00	$108.70	6.0%	$0.00	$159.26	6.0%	$0.00	$209.82
$45,000	6.0%	$0.00	$133.70	6.0%	$0.00	$184.26	6.0%	$0.00	$234.82
$50,000	6.0%	$0.00	$158.70	6.0%	$0.00	$209.26	6.0%	$0.00	$259.82
$55,000	6.0%	$0.00	$183.70	6.0%	$0.00	$234.26	6.0%	$0.00	$284.82
$60,000	6.0%	$0.00	$208.70	6.0%	$0.00	$259.26	6.0%	$0.00	$309.82
$65,000	6.0%	$0.00	$233.70	6.0%	$0.00	$284.26	6.0%	$0.00	$334.82

Monthly Consumption of 2,000 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	17.5%	$95.84	$0.00	11.4%	$45.28	$0.00	6.0%	$0.00	$5.28
$15,000	11.7%	$70.84	$0.00	7.6%	$20.28	$0.00	6.0%	$0.00	$30.28
$20,000	8.8%	$45.84	$0.00	6.0%	$0.00	$4.72	6.0%	$0.00	$55.28
$25,000	7.0%	$20.84	$0.00	6.0%	$0.00	$29.72	6.0%	$0.00	$80.28
$30,000	6.0%	$0.00	$4.16	6.0%	$0.00	$54.72	6.0%	$0.00	$105.28
$35,000	6.0%	$0.00	$29.16	6.0%	$0.00	$79.72	6.0%	$0.00	$130.28
$40,000	6.0%	$0.00	$54.16	6.0%	$0.00	$104.72	6.0%	$0.00	$155.28
$45,000	6.0%	$0.00	$79.16	6.0%	$0.00	$129.72	6.0%	$0.00	$180.28
$50,000	6.0%	$0.00	$104.16	6.0%	$0.00	$154.72	6.0%	$0.00	$205.28
$55,000	6.0%	$0.00	$129.16	6.0%	$0.00	$179.72	6.0%	$0.00	$230.28
$60,000	6.0%	$0.00	$154.16	6.0%	$0.00	$204.72	6.0%	$0.00	$255.28
$65,000	6.0%	$0.00	$179.16	6.0%	$0.00	$229.72	6.0%	$0.00	$280.28

Monthly Consumption of 2,500 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	30.6%	$204.92	$0.00	24.5%	$154.36	$0.00	18.5%	$103.80	$0.00
$15,000	20.4%	$179.92	$0.00	16.3%	$129.36	$0.00	12.3%	$78.80	$0.00
$20,000	15.3%	$154.92	$0.00	12.3%	$104.36	$0.00	9.2%	$53.80	$0.00
$25,000	12.2%	$129.92	$0.00	9.8%	$79.36	$0.00	7.4%	$28.80	$0.00
$30,000	10.2%	$104.92	$0.00	8.2%	$54.36	$0.00	6.2%	$3.80	$0.00
$35,000	8.7%	$79.92	$0.00	7.0%	$29.36	$0.00	6.0%	$0.00	$21.20
$40,000	7.6%	$54.92	$0.00	6.1%	$4.36	$0.00	6.0%	$0.00	$46.20
$45,000	6.8%	$29.92	$0.00	6.0%	$0.00	$20.64	6.0%	$0.00	$71.20
$50,000	6.1%	$4.92	$0.00	6.0%	$0.00	$45.64	6.0%	$0.00	$96.20
$55,000	6.0%	$0.00	$20.08	6.0%	$0.00	$70.64	6.0%	$0.00	$121.20
$60,000	6.0%	$0.00	$45.08	6.0%	$0.00	$95.64	6.0%	$0.00	$146.20
$65,000	6.0%	$0.00	$70.08	6.0%	$0.00	$120.64	6.0%	$0.00	$171.20

RG&E Electric Customer, Tier 3 EAP with Electric Heat

Monthly Consumption of 1,247 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	6.0%	$0.00	$20.34	6.0%	$0.00	$53.07	6.0%	$0.00	$85.80
$15,000	6.0%	$0.00	$45.34	6.0%	$0.00	$78.07	6.0%	$0.00	$110.80
$20,000	6.0%	$0.00	$70.34	6.0%	$0.00	$103.07	6.0%	$0.00	$135.80
$25,000	6.0%	$0.00	$95.34	6.0%	$0.00	$128.07	6.0%	$0.00	$160.80
$30,000	6.0%	$0.00	$120.34	6.0%	$0.00	$153.07	6.0%	$0.00	$185.80
$35,000	6.0%	$0.00	$145.34	6.0%	$0.00	$178.07	6.0%	$0.00	$210.80
$40,000	6.0%	$0.00	$170.34	6.0%	$0.00	$203.07	6.0%	$0.00	$235.80
$45,000	6.0%	$0.00	$195.34	6.0%	$0.00	$228.07	6.0%	$0.00	$260.80
$50,000	6.0%	$0.00	$220.34	6.0%	$0.00	$253.07	6.0%	$0.00	$285.80
$55,000	6.0%	$0.00	$245.34	6.0%	$0.00	$278.07	6.0%	$0.00	$310.80
$60,000	6.0%	$0.00	$270.34	6.0%	$0.00	$303.07	6.0%	$0.00	$335.80
$65,000	6.0%	$0.00	$295.34	6.0%	$0.00	$328.07	6.0%	$0.00	$360.80

Monthly Consumption of 1,500 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	8.4%	$19.77	$0.00	6.0%	$0.00	$12.96	6.0%	$0.00	$45.69
$15,000	6.0%	$0.00	$5.23	6.0%	$0.00	$37.96	6.0%	$0.00	$70.69
$20,000	6.0%	$0.00	$30.23	6.0%	$0.00	$62.96	6.0%	$0.00	$95.69
$25,000	6.0%	$0.00	$55.23	6.0%	$0.00	$87.96	6.0%	$0.00	$120.69
$30,000	6.0%	$0.00	$80.23	6.0%	$0.00	$112.96	6.0%	$0.00	$145.69
$35,000	6.0%	$0.00	$105.23	6.0%	$0.00	$137.96	6.0%	$0.00	$170.69
$40,000	6.0%	$0.00	$130.23	6.0%	$0.00	$162.96	6.0%	$0.00	$195.69
$45,000	6.0%	$0.00	$155.23	6.0%	$0.00	$187.96	6.0%	$0.00	$220.69
$50,000	6.0%	$0.00	$180.23	6.0%	$0.00	$212.96	6.0%	$0.00	$245.69
$55,000	6.0%	$0.00	$205.23	6.0%	$0.00	$237.96	6.0%	$0.00	$270.69
$60,000	6.0%	$0.00	$230.23	6.0%	$0.00	$262.96	6.0%	$0.00	$295.69
$65,000	6.0%	$0.00	$255.23	6.0%	$0.00	$287.96	6.0%	$0.00	$320.69

Monthly Consumption of 2,000 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	17.9%	$99.12	$0.00	14.0%	$66.39	$0.00	10.0%	$33.66	$0.00
$15,000	11.9%	$74.12	$0.00	9.3%	$41.39	$0.00	6.7%	$8.66	$0.00
$20,000	8.9%	$49.12	$0.00	7.0%	$16.39	$0.00	6.0%	$0.00	$16.34
$25,000	7.2%	$24.12	$0.00	6.0%	$0.00	$8.61	6.0%	$0.00	$41.34
$30,000	6.0%	$0.00	$0.88	6.0%	$0.00	$33.61	6.0%	$0.00	$66.34
$35,000	6.0%	$0.00	$25.88	6.0%	$0.00	$58.61	6.0%	$0.00	$91.34
$40,000	6.0%	$0.00	$50.88	6.0%	$0.00	$83.61	6.0%	$0.00	$116.34
$45,000	6.0%	$0.00	$75.88	6.0%	$0.00	$108.61	6.0%	$0.00	$141.34
$50,000	6.0%	$0.00	$100.88	6.0%	$0.00	$133.61	6.0%	$0.00	$166.34
$55,000	6.0%	$0.00	$125.88	6.0%	$0.00	$158.61	6.0%	$0.00	$191.34
$60,000	6.0%	$0.00	$150.88	6.0%	$0.00	$183.61	6.0%	$0.00	$216.34
$65,000	6.0%	$0.00	$175.88	6.0%	$0.00	$208.61	6.0%	$0.00	$241.34

Monthly Consumption of 2,500 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	27.4%	$178.47	$0.00	23.5%	$145.74	$0.00	19.6%	$113.01	$0.00
$15,000	18.3%	$153.47	$0.00	15.7%	$120.74	$0.00	13.0%	$88.01	$0.00
$20,000	13.7%	$128.47	$0.00	11.7%	$95.74	$0.00	9.8%	$63.01	$0.00
$25,000	11.0%	$103.47	$0.00	9.4%	$70.74	$0.00	7.82%	$38.01	$0.00
$30,000	9.1%	$78.47	$0.00	7.8%	$45.74	$0.00	6.5%	$13.01	$0.00
$35,000	7.8%	$53.47	$0.00	6.7%	$20.74	$0.00	6.0%	$0.00	$11.99
$40,000	6.9%	$28.47	$0.00	6.0%	$0.00	$4.26	6.0%	$0.00	$36.99
$45,000	6.1%	$3.47	$0.00	6.0%	$0.00	$29.26	6.0%	$0.00	$61.99
$50,000	6.0%	$0.00	$21.53	6.0%	$0.00	$54.26	6.0%	$0.00	$86.99
$55,000	6.0%	$0.00	$46.53	6.0%	$0.00	$79.26	6.0%	$0.00	$111.99
$60,000	6.0%	$0.00	$71.53	6.0%	$0.00	$104.26	6.0%	$0.00	$136.99
$65,000	6.0%	$0.00	$96.53	6.0%	$0.00	$129.26	6.0%	$0.00	$161.99

A.2-Sensitivity Analysis for Tier 1 EAP Customers with Electric Heat, by Utility

Central Hudson Electric Customer, Tier 1 EAP with Electric Heat

Monthly Consumption of 1,318 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	6.0%	$0.00	$2.30	6.0%	$0.00	$50.37	6.0%	$0.00	$98.44
$15,000	6.0%	$0.00	$27.30	6.0%	$0.00	$75.37	6.0%	$0.00	$123.44
$20,000	6.0%	$0.00	$52.30	6.0%	$0.00	$100.37	6.0%	$0.00	$148.44
$25,000	6.0%	$0.00	$77.30	6.0%	$0.00	$125.37	6.0%	$0.00	$173.44
$30,000	6.0%	$0.00	$102.30	6.0%	$0.00	$150.37	6.0%	$0.00	$198.44
$35,000	6.0%	$0.00	$127.30	6.0%	$0.00	$175.37	6.0%	$0.00	$223.44
$40,000	6.0%	$0.00	$152.30	6.0%	$0.00	$200.37	6.0%	$0.00	$248.44
$45,000	6.0%	$0.00	$177.30	6.0%	$0.00	$225.37	6.0%	$0.00	$273.44
$50,000	6.0%	$0.00	$202.30	6.0%	$0.00	$250.37	6.0%	$0.00	$298.44
$55,000	6.0%	$0.00	$227.30	6.0%	$0.00	$275.37	6.0%	$0.00	$323.44
$60,000	6.0%	$0.00	$252.30	6.0%	$0.00	$300.37	6.0%	$0.00	$348.44
$65,000	6.0%	$0.00	$277.30	6.0%	$0.00	$325.37	6.0%	$0.00	$373.44

Monthly Consumption of 1,500 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	10.4%	$36.71	$0.00	6.00%	$0.00	$11.36	6.0%	$0.00	$59.43
$15,000	6.9%	$11.71	$0.00	6.0%	$0.00	$36.36	6.0%	$0.00	$84.43
$20,000	6.0%	$0.00	$13.29	6.0%	$0.00	$61.36	6.0%	$0.00	$109.43
$25,000	6.0%	$0.00	$38.29	6.0%	$0.00	$86.36	6.0%	$0.00	$134.43
$30,000	6.0%	$0.00	$63.29	6.0%	$0.00	$111.36	6.0%	$0.00	$159.43
$35,000	6.0%	$0.00	$88.29	6.0%	$0.00	$136.36	6.0%	$0.00	$184.43
$40,000	6.0%	$0.00	$113.29	6.0%	$0.00	$161.36	6.0%	$0.00	$209.43
$45,000	6.0%	$0.00	$138.29	6.0%	$0.00	$186.36	6.0%	$0.00	$234.43
$50,000	6.0%	$0.00	$163.29	6.0%	$0.00	$211.36	6.0%	$0.00	$259.43
$55,000	6.0%	$0.00	$188.29	6.0%	$0.00	$236.36	6.0%	$0.00	$284.43
$60,000	6.0%	$0.00	$213.29	6.0%	$0.00	$261.36	6.0%	$0.00	$309.43
$65,000	6.0%	$0.00	$238.29	6.0%	$0.00	$286.36	6.0%	$0.00	$334.43

Monthly Consumption of 2,000 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	23.3%	$144.01	$0.00	17.5%	$95.94	$0.00	11.7%	$47.87	$0.00
$15,000	15.5%	$119.01	$0.00	11.7%	$70.94	$0.00	7.8%	$22.87	$0.00
$20,000	11.6%	$94.01	$0.00	8.8%	$45.94	$0.00	6.0%	$0.00	$2.13
$25,000	9.3%	$69.01	$0.00	7.0%	$20.94	$0.00	6.0%	$0.00	$27.13
$30,000	7.8%	$44.01	$0.00	6.0%	$0.00	$4.06	6.0%	$0.00	$52.13
$35,000	6.7%	$19.01	$0.00	6.0%	$0.00	$29.06	6.0%	$0.00	$77.13
$40,000	6.0%	$0.00	$5.99	6.0%	$0.00	$54.06	6.0%	$0.00	$102.13
$45,000	6.0%	$0.00	$30.99	6.0%	$0.00	$79.06	6.0%	$0.00	$127.13
$50,000	6.0%	$0.00	$55.99	6.0%	$0.00	$104.06	6.0%	$0.00	$152.13
$55,000	6.0%	$0.00	$80.99	6.0%	$0.00	$129.06	6.0%	$0.00	$177.13
$60,000	6.0%	$0.00	$105.99	6.0%	$0.00	$154.06	6.0%	$0.00	$202.13
$65,000	6.0%	$0.00	$130.99	6.0%	$0.00	$179.06	6.0%	$0.00	$227.13

Monthly Consumption of 2,500 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	36.2%	$251.31	$0.00	30.4%	$203.24	$0.00	24.6%	$155.17	$0.00
$15,000	24.1%	$226.31	$0.00	20.3%	$178.24	$0.00	16.4%	$130.17	$0.00
$20,000	18.1%	$201.31	$0.00	15.2%	$153.24	$0.00	12.3%	$105.17	$0.00
$25,000	14.5%	$176.31	$0.00	12.2%	$128.24	$0.00	9.85%	$80.17	$0.00
$30,000	12.1%	$151.31	$0.00	10.1%	$103.24	$0.00	8.2%	$55.17	$0.00
$35,000	10.3%	$126.31	$0.00	8.7%	$78.24	$0.00	7.0%	$30.17	$0.00
$40,000	9.0%	$101.31	$0.00	7.6%	$53.24	$0.00	6.2%	$5.17	$0.00
$45,000	8.0%	$76.31	$0.00	6.8%	$28.24	$0.00	6.0%	$0.00	$19.83
$50,000	7.2%	$51.31	$0.00	6.1%	$3.24	$0.00	6.0%	$0.00	$44.83
$55,000	6.6%	$26.31	$0.00	6.0%	$0.00	$21.76	6.0%	$0.00	$69.83
$60,000	6.0%	$1.31	$0.00	6.0%	$0.00	$46.76	6.0%	$0.00	$94.83
$65,000	6.0%	$0.00	$23.69	6.0%	$0.00	$71.76	6.0%	$0.00	$119.83

Con Edison Electricity Customer, Tier 1 EAP with Electric Heat

Monthly Consumption of 1,093 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	12.6%	$55.41	$0.00	6.0%	$0.00	$3.31	6.0%	$0.00	$62.02
$15,000	8.4%	$30.41	$0.00	6.0%	$0.00	$28.31	6.0%	$0.00	$87.02
$20,000	6.3%	$5.41	$0.00	6.0%	$0.00	$53.31	6.0%	$0.00	$112.02
$25,000	6.0%	$0.00	$19.59	6.0%	$0.00	$78.31	6.0%	$0.00	$137.02
$30,000	6.0%	$0.00	$44.59	6.0%	$0.00	$103.31	6.0%	$0.00	$162.02
$35,000	6.0%	$0.00	$69.59	6.0%	$0.00	$128.31	6.0%	$0.00	$187.02
$40,000	6.0%	$0.00	$94.59	6.0%	$0.00	$153.31	6.0%	$0.00	$212.02
$45,000	6.0%	$0.00	$119.59	6.0%	$0.00	$178.31	6.0%	$0.00	$237.02
$50,000	6.0%	$0.00	$144.59	6.0%	$0.00	$203.31	6.0%	$0.00	$262.02
$55,000	6.0%	$0.00	$169.59	6.0%	$0.00	$228.31	6.0%	$0.00	$287.02
$60,000	6.0%	$0.00	$194.59	6.0%	$0.00	$253.31	6.0%	$0.00	$312.02
$65,000	6.0%	$0.00	$219.59	6.0%	$0.00	$278.31	6.0%	$0.00	$337.02

Monthly Consumption of 1,500 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	29.7%	$197.77	$0.00	22.69%	$139.06	$0.00	15.6%	$80.35	$0.00
$15,000	19.8%	$172.77	$0.00	15.1%	$114.06	$0.00	10.4%	$55.35	$0.00
$20,000	14.9%	$147.77	$0.00	11.3%	$89.06	$0.00	7.8%	$30.35	$0.00
$25,000	11.9%	$122.77	$0.00	9.1%	$64.06	$0.00	6.3%	$5.35	$0.00
$30,000	9.9%	$97.77	$0.00	7.6%	$39.06	$0.00	6.0%	$0.00	$19.66
$35,000	8.5%	$72.77	$0.00	6.5%	$14.06	$0.00	6.0%	$0.00	$44.66
$40,000	7.4%	$47.77	$0.00	6.0%	$0.00	$10.94	6.0%	$0.00	$69.66
$45,000	6.6%	$22.77	$0.00	6.0%	$0.00	$35.94	6.0%	$0.00	$94.66
$50,000	6.0%	$0.00	$2.23	6.0%	$0.00	$60.94	6.0%	$0.00	$119.66
$55,000	6.0%	$0.00	$27.23	6.0%	$0.00	$85.94	6.0%	$0.00	$144.66
$60,000	6.0%	$0.00	$52.23	6.0%	$0.00	$110.94	6.0%	$0.00	$169.66
$65,000	6.0%	$0.00	$77.23	6.0%	$0.00	$135.94	6.0%	$0.00	$194.66

Monthly Consumption of 2,000 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	50.7%	$372.77	$0.00	43.7%	$314.06	$0.00	36.6%	$255.35	$0.00
$15,000	33.8%	$347.77	$0.00	29.1%	$289.06	$0.00	24.4%	$230.35	$0.00
$20,000	25.4%	$322.77	$0.00	21.8%	$264.06	$0.00	18.3%	$205.35	$0.00
$25,000	20.3%	$297.77	$0.00	17.5%	$239.06	$0.00	14.7%	$180.35	$0.00
$30,000	16.9%	$272.77	$0.00	14.6%	$214.06	$0.00	12.2%	$155.35	$0.00
$35,000	14.5%	$247.77	$0.00	12.5%	$189.06	$0.00	10.5%	$130.35	$0.00
$40,000	12.7%	$222.77	$0.00	10.9%	$164.06	$0.00	9.2%	$105.35	$0.00
$45,000	11.3%	$197.77	$0.00	9.7%	$139.06	$0.00	8.1%	$80.35	$0.00
$50,000	10.1%	$172.77	$0.00	8.7%	$114.06	$0.00	7.3%	$55.35	$0.00
$55,000	9.2%	$147.77	$0.00	7.9%	$89.06	$0.00	6.7%	$30.35	$0.00
$60,000	8.5%	$122.77	$0.00	7.3%	$64.06	$0.00	6.1%	$5.35	$0.00
$65,000	7.8%	$97.77	$0.00	6.7%	$39.06	$0.00	6.0%	$0.00	$19.66

Monthly Consumption of 2,500 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	71.7%	$547.77	$0.00	64.7%	$489.06	$0.00	57.6%	$430.35	$0.00
$15,000	47.8%	$522.77	$0.00	43.1%	$464.06	$0.00	38.4%	$405.35	$0.00
$20,000	35.9%	$497.77	$0.00	32.3%	$439.06	$0.00	28.8%	$380.35	$0.00
$25,000	28.7%	$472.77	$0.00	25.9%	$414.06	$0.00	23.06%	$355.35	$0.00
$30,000	23.9%	$447.77	$0.00	21.6%	$389.06	$0.00	19.2%	$330.35	$0.00
$35,000	20.5%	$422.77	$0.00	18.5%	$364.06	$0.00	16.5%	$305.35	$0.00
$40,000	17.9%	$397.77	$0.00	16.2%	$339.06	$0.00	14.4%	$280.35	$0.00
$45,000	15.9%	$372.77	$0.00	14.4%	$314.06	$0.00	12.8%	$255.35	$0.00
$50,000	14.3%	$347.77	$0.00	12.9%	$289.06	$0.00	11.5%	$230.35	$0.00
$55,000	13.0%	$322.77	$0.00	11.8%	$264.06	$0.00	10.5%	$205.35	$0.00
$60,000	12.0%	$297.77	$0.00	10.8%	$239.06	$0.00	9.6%	$180.35	$0.00
$65,000	11.0%	$272.77	$0.00	10.0%	$214.06	$0.00	8.9%	$155.35	$0.00

National Grid Electric Customer, Tier 1 EAP with Electric Heat

Monthly Consumption of 1,163 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	7.7%	$14.53	$0.00	6.0%	$0.00	$16.65	6.0%	$0.00	$47.83
$15,000	6.0%	$0.00	$10.47	6.0%	$0.00	$41.65	6.0%	$0.00	$72.83
$20,000	6.0%	$0.00	$35.47	6.0%	$0.00	$66.65	6.0%	$0.00	$97.83
$25,000	6.0%	$0.00	$60.47	6.0%	$0.00	$91.65	6.0%	$0.00	$122.83
$30,000	6.0%	$0.00	$85.47	6.0%	$0.00	$116.65	6.0%	$0.00	$147.83
$35,000	6.0%	$0.00	$110.47	6.0%	$0.00	$141.65	6.0%	$0.00	$172.83
$40,000	6.0%	$0.00	$135.47	6.0%	$0.00	$166.65	6.0%	$0.00	$197.83
$45,000	6.0%	$0.00	$160.47	6.0%	$0.00	$191.65	6.0%	$0.00	$222.83
$50,000	6.0%	$0.00	$185.47	6.0%	$0.00	$216.65	6.0%	$0.00	$247.83
$55,000	6.0%	$0.00	$210.47	6.0%	$0.00	$241.65	6.0%	$0.00	$272.83
$60,000	6.0%	$0.00	$235.47	6.0%	$0.00	$266.65	6.0%	$0.00	$297.83
$65,000	6.0%	$0.00	$260.47	6.0%	$0.00	$291.65	6.0%	$0.00	$322.83

Monthly Consumption of 1,500 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	14.5%	$71.21	$0.00	10.80%	$40.03	$0.00	7.1%	$8.85	$0.00
$15,000	9.7%	$46.21	$0.00	7.2%	$15.03	$0.00	6.0%	$0.00	$16.15
$20,000	7.3%	$21.21	$0.00	6.0%	$0.00	$9.97	6.0%	$0.00	$41.15
$25,000	6.0%	$0.00	$3.79	6.0%	$0.00	$34.97	6.0%	$0.00	$66.15
$30,000	6.0%	$0.00	$28.79	6.0%	$0.00	$59.97	6.0%	$0.00	$91.15
$35,000	6.0%	$0.00	$53.79	6.0%	$0.00	$84.97	6.0%	$0.00	$116.15
$40,000	6.0%	$0.00	$78.79	6.0%	$0.00	$109.97	6.0%	$0.00	$141.15
$45,000	6.0%	$0.00	$103.79	6.0%	$0.00	$134.97	6.0%	$0.00	$166.15
$50,000	6.0%	$0.00	$128.79	6.0%	$0.00	$159.97	6.0%	$0.00	$191.15
$55,000	6.0%	$0.00	$153.79	6.0%	$0.00	$184.97	6.0%	$0.00	$216.15
$60,000	6.0%	$0.00	$178.79	6.0%	$0.00	$209.97	6.0%	$0.00	$241.15
$65,000	6.0%	$0.00	$203.79	6.0%	$0.00	$234.97	6.0%	$0.00	$266.15

Monthly Consumption of 2,000 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	24.6%	$155.36	$0.00	20.9%	$124.18	$0.00	17.2%	$93.00	$0.00
$15,000	16.4%	$130.36	$0.00	13.9%	$99.18	$0.00	11.4%	$68.00	$0.00
$20,000	12.3%	$105.36	$0.00	10.5%	$74.18	$0.00	8.6%	$43.00	$0.00
$25,000	9.9%	$80.36	$0.00	8.4%	$49.18	$0.00	6.9%	$18.00	$0.00
$30,000	8.2%	$55.36	$0.00	7.0%	$24.18	$0.00	6.0%	$0.00	$7.00
$35,000	7.0%	$30.36	$0.00	6.0%	$0.00	$0.82	6.0%	$0.00	$32.00
$40,000	6.2%	$5.36	$0.00	6.0%	$0.00	$25.82	6.0%	$0.00	$57.00
$45,000	6.0%	$0.00	$19.64	6.0%	$0.00	$50.82	6.0%	$0.00	$82.00
$50,000	6.0%	$0.00	$44.64	6.0%	$0.00	$75.82	6.0%	$0.00	$107.00
$55,000	6.0%	$0.00	$69.64	6.0%	$0.00	$100.82	6.0%	$0.00	$132.00
$60,000	6.0%	$0.00	$94.64	6.0%	$0.00	$125.82	6.0%	$0.00	$157.00
$65,000	6.0%	$0.00	$119.64	6.0%	$0.00	$150.82	6.0%	$0.00	$182.00

Monthly Consumption of 2,500 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	34.7%	$239.52	$0.00	31.0%	$208.34	$0.00	27.3%	$177.16	$0.00
$15,000	23.2%	$214.52	$0.00	20.7%	$183.34	$0.00	18.2%	$152.16	$0.00
$20,000	17.4%	$189.52	$0.00	15.5%	$158.34	$0.00	13.6%	$127.16	$0.00
$25,000	13.9%	$164.52	$0.00	12.4%	$133.34	$0.00	10.90%	$102.16	$0.00
$30,000	11.6%	$139.52	$0.00	10.3%	$108.34	$0.00	9.1%	$77.16	$0.00
$35,000	9.9%	$114.52	$0.00	8.9%	$83.34	$0.00	7.8%	$52.16	$0.00
$40,000	8.7%	$89.52	$0.00	7.8%	$58.34	$0.00	6.8%	$27.16	$0.00
$45,000	7.7%	$64.52	$0.00	6.9%	$33.34	$0.00	6.1%	$2.16	$0.00
$50,000	6.9%	$39.52	$0.00	6.2%	$8.34	$0.00	6.0%	$0.00	$22.84
$55,000	6.3%	$14.52	$0.00	6.0%	$0.00	$16.66	6.0%	$0.00	$47.84
$60,000	6.0%	$0.00	$10.48	6.0%	$0.00	$41.66	6.0%	$0.00	$72.84
$65,000	6.0%	$0.00	$35.48	6.0%	$0.00	$66.66	6.0%	$0.00	$97.84

O&R Electric Customer, Tier 1 EAP with Electric Heat

Monthly Consumption of 1,349 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	6.0%	$0.00	$17.17	6.0%	$0.00	$67.73	6.0%	$0.00	$118.29
$15,000	6.0%	$0.00	$42.17	6.0%	$0.00	$92.73	6.0%	$0.00	$143.29
$20,000	6.0%	$0.00	$67.17	6.0%	$0.00	$117.73	6.0%	$0.00	$168.29
$25,000	6.0%	$0.00	$92.17	6.0%	$0.00	$142.73	6.0%	$0.00	$193.29
$30,000	6.0%	$0.00	$117.17	6.0%	$0.00	$167.73	6.0%	$0.00	$218.29
$35,000	6.0%	$0.00	$142.17	6.0%	$0.00	$192.73	6.0%	$0.00	$243.29
$40,000	6.0%	$0.00	$167.17	6.0%	$0.00	$217.73	6.0%	$0.00	$268.29
$45,000	6.0%	$0.00	$192.17	6.0%	$0.00	$242.73	6.0%	$0.00	$293.29
$50,000	6.0%	$0.00	$217.17	6.0%	$0.00	$267.73	6.0%	$0.00	$318.29
$55,000	6.0%	$0.00	$242.17	6.0%	$0.00	$292.73	6.0%	$0.00	$343.29
$60,000	6.0%	$0.00	$267.17	6.0%	$0.00	$317.73	6.0%	$0.00	$368.29
$65,000	6.0%	$0.00	$292.17	6.0%	$0.00	$342.73	6.0%	$0.00	$393.29

Monthly Consumption of 1,750 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	14.4%	$70.26	$0.00	8.4%	$19.70	$0.00	6.0%	$0.00	$30.86
$15,000	9.6%	$45.26	$0.00	6.0%	$0.00	$5.30	6.0%	$0.00	$55.86
$20,000	7.2%	$20.26	$0.00	6.0%	$0.00	$30.30	6.0%	$0.00	$80.86
$25,000	6.0%	$0.00	$4.74	6.0%	$0.00	$55.30	6.0%	$0.00	$105.86
$30,000	6.0%	$0.00	$29.74	6.0%	$0.00	$80.30	6.0%	$0.00	$130.86
$35,000	6.0%	$0.00	$54.74	6.0%	$0.00	$105.30	6.0%	$0.00	$155.86
$40,000	6.0%	$0.00	$79.74	6.0%	$0.00	$130.30	6.0%	$0.00	$180.86
$45,000	6.0%	$0.00	$104.74	6.0%	$0.00	$155.30	6.0%	$0.00	$205.86
$50,000	6.0%	$0.00	$129.74	6.0%	$0.00	$180.30	6.0%	$0.00	$230.86
$55,000	6.0%	$0.00	$154.74	6.0%	$0.00	$205.30	6.0%	$0.00	$255.86
$60,000	6.0%	$0.00	$179.74	6.0%	$0.00	$230.30	6.0%	$0.00	$280.86
$65,000	6.0%	$0.00	$204.74	6.0%	$0.00	$255.30	6.0%	$0.00	$305.86

Monthly Consumption of 2,000 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	21.0%	$124.80	$0.00	14.9%	$74.24	$0.00	8.8%	$23.68	$0.00
$15,000	14.0%	$99.80	$0.00	9.9%	$49.24	$0.00	6.0%	$0.00	$1.32
$20,000	10.5%	$74.80	$0.00	7.5%	$24.24	$0.00	6.0%	$0.00	$26.32
$25,000	8.4%	$49.80	$0.00	6.0%	$0.00	$0.76	6.0%	$0.00	$51.32
$30,000	7.0%	$24.80	$0.00	6.0%	$0.00	$25.76	6.0%	$0.00	$76.32
$35,000	6.0%	$0.00	$0.20	6.0%	$0.00	$50.76	6.0%	$0.00	$101.32
$40,000	6.0%	$0.00	$25.20	6.0%	$0.00	$75.76	6.0%	$0.00	$126.32
$45,000	6.0%	$0.00	$50.20	6.0%	$0.00	$100.76	6.0%	$0.00	$151.32
$50,000	6.0%	$0.00	$75.20	6.0%	$0.00	$125.76	6.0%	$0.00	$176.32
$55,000	6.0%	$0.00	$100.20	6.0%	$0.00	$150.76	6.0%	$0.00	$201.32
$60,000	6.0%	$0.00	$125.20	6.0%	$0.00	$175.76	6.0%	$0.00	$226.32
$65,000	6.0%	$0.00	$150.20	6.0%	$0.00	$200.76	6.0%	$0.00	$251.32

Monthly Consumption of 2,500 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	34.1%	$233.88	$0.00	28.0%	$183.32	$0.00	21.9%	$132.76	$0.00
$15,000	22.7%	$208.88	$0.00	18.7%	$158.32	$0.00	14.6%	$107.76	$0.00
$20,000	17.0%	$183.88	$0.00	14.0%	$133.32	$0.00	11.0%	$82.76	$0.00
$25,000	13.6%	$158.88	$0.00	11.2%	$108.32	$0.00	8.8%	$57.76	$0.00
$30,000	11.4%	$133.88	$0.00	9.3%	$83.32	$0.00	7.3%	$32.76	$0.00
$35,000	9.7%	$108.88	$0.00	8.0%	$58.32	$0.00	6.3%	$7.76	$0.00
$40,000	8.5%	$83.88	$0.00	7.0%	$33.32	$0.00	6.0%	$0.00	$17.24
$45,000	7.6%	$58.88	$0.00	6.2%	$8.32	$0.00	6.0%	$0.00	$42.24
$50,000	6.8%	$33.88	$0.00	6.0%	$0.00	$16.68	6.0%	$0.00	$67.24
$55,000	6.2%	$8.88	$0.00	6.0%	$0.00	$41.68	6.0%	$0.00	$92.24
$60,000	6.0%	$0.00	$16.12	6.0%	$0.00	$66.68	6.0%	$0.00	$117.24
$65,000	6.0%	$0.00	$41.12	6.0%	$0.00	$91.68	6.0%	$0.00	$142.24

NYSEG Electric Customer, Tier 1 EAP with Electric Heat

Monthly Consumption of 1,430 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	6.0%	$0.00	$9.97	6.0%	$0.00	$47.91	6.0%	$0.00	$85.86
$15,000	6.0%	$0.00	$34.97	6.0%	$0.00	$72.91	6.0%	$0.00	$110.86
$20,000	6.0%	$0.00	$59.97	6.0%	$0.00	$97.91	6.0%	$0.00	$135.86
$25,000	6.0%	$0.00	$84.97	6.0%	$0.00	$122.91	6.0%	$0.00	$160.86
$30,000	6.0%	$0.00	$109.97	6.0%	$0.00	$147.91	6.0%	$0.00	$185.86
$35,000	6.0%	$0.00	$134.97	6.0%	$0.00	$172.91	6.0%	$0.00	$210.86
$40,000	6.0%	$0.00	$159.97	6.0%	$0.00	$197.91	6.0%	$0.00	$235.86
$45,000	6.0%	$0.00	$184.97	6.0%	$0.00	$222.91	6.0%	$0.00	$260.86
$50,000	6.0%	$0.00	$209.97	6.0%	$0.00	$247.91	6.0%	$0.00	$285.86
$55,000	6.0%	$0.00	$234.97	6.0%	$0.00	$272.91	6.0%	$0.00	$310.86
$60,000	6.0%	$0.00	$259.97	6.0%	$0.00	$297.91	6.0%	$0.00	$335.86
$65,000	6.0%	$0.00	$284.97	6.0%	$0.00	$322.91	6.0%	$0.00	$360.86

Monthly Consumption of 1,750 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	10.6%	$38.18	$0.00	6.03%	$0.23	$0.00	6.0%	$0.00	$37.71
$15,000	7.1%	$13.18	$0.00	6.0%	$0.00	$24.77	6.0%	$0.00	$62.71
$20,000	6.0%	$0.00	$11.82	6.0%	$0.00	$49.77	6.0%	$0.00	$87.71
$25,000	6.0%	$0.00	$36.82	6.0%	$0.00	$74.77	6.0%	$0.00	$112.71
$30,000	6.0%	$0.00	$61.82	6.0%	$0.00	$99.77	6.0%	$0.00	$137.71
$35,000	6.0%	$0.00	$86.82	6.0%	$0.00	$124.77	6.0%	$0.00	$162.71
$40,000	6.0%	$0.00	$111.82	6.0%	$0.00	$149.77	6.0%	$0.00	$187.71
$45,000	6.0%	$0.00	$136.82	6.0%	$0.00	$174.77	6.0%	$0.00	$212.71
$50,000	6.0%	$0.00	$161.82	6.0%	$0.00	$199.77	6.0%	$0.00	$237.71
$55,000	6.0%	$0.00	$186.82	6.0%	$0.00	$224.77	6.0%	$0.00	$262.71
$60,000	6.0%	$0.00	$211.82	6.0%	$0.00	$249.77	6.0%	$0.00	$287.71
$65,000	6.0%	$0.00	$236.82	6.0%	$0.00	$274.77	6.0%	$0.00	$312.71

Monthly Consumption of 2,000 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Under Limit	$ Under Cap	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	15.1%	$75.83	$0.00	10.5%	$37.88	$0.00	6.0%	$0.00	$0.07
$15,000	10.1%	$50.83	$0.00	7.0%	$12.88	$0.00	6.0%	$0.00	$25.07
$20,000	7.5%	$25.83	$0.00	6.0%	$0.00	$12.12	6.0%	$0.00	$50.07
$25,000	6.0%	$0.83	$0.00	6.0%	$0.00	$37.12	6.0%	$0.00	$75.07
$30,000	6.0%	$0.00	$24.17	6.0%	$0.00	$62.12	6.0%	$0.00	$100.07
$35,000	6.0%	$0.00	$49.17	6.0%	$0.00	$87.12	6.0%	$0.00	$125.07
$40,000	6.0%	$0.00	$74.17	6.0%	$0.00	$112.12	6.0%	$0.00	$150.07
$45,000	6.0%	$0.00	$99.17	6.0%	$0.00	$137.12	6.0%	$0.00	$175.07
$50,000	6.0%	$0.00	$124.17	6.0%	$0.00	$162.12	6.0%	$0.00	$200.07
$55,000	6.0%	$0.00	$149.17	6.0%	$0.00	$187.12	6.0%	$0.00	$225.07
$60,000	6.0%	$0.00	$174.17	6.0%	$0.00	$212.12	6.0%	$0.00	$250.07
$65,000	6.0%	$0.00	$199.17	6.0%	$0.00	$237.12	6.0%	$0.00	$275.07

Monthly Consumption of 2,500 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	24.1%	$151.12	$0.00	19.6%	$113.17	$0.00	15.0%	$75.22	$0.00
$15,000	16.1%	$126.12	$0.00	13.1%	$88.17	$0.00	10.0%	$50.22	$0.00
$20,000	12.1%	$101.12	$0.00	9.8%	$63.17	$0.00	7.5%	$25.22	$0.00
$25,000	9.7%	$76.12	$0.00	7.8%	$38.17	$0.00	6.01%	$0.22	$0.00
$30,000	8.0%	$51.12	$0.00	6.5%	$13.17	$0.00	6.0%	$0.00	$24.78
$35,000	6.9%	$26.12	$0.00	6.0%	$0.00	$11.83	6.0%	$0.00	$49.78
$40,000	6.0%	$1.12	$0.00	6.0%	$0.00	$36.83	6.0%	$0.00	$74.78
$45,000	6.0%	$0.00	$23.88	6.0%	$0.00	$61.83	6.0%	$0.00	$99.78
$50,000	6.0%	$0.00	$48.88	6.0%	$0.00	$86.83	6.0%	$0.00	$124.78
$55,000	6.0%	$0.00	$73.88	6.0%	$0.00	$111.83	6.0%	$0.00	$149.78
$60,000	6.0%	$0.00	$98.88	6.0%	$0.00	$136.83	6.0%	$0.00	$174.78
$65,000	6.0%	$0.00	$123.88	6.0%	$0.00	$161.83	6.0%	$0.00	$199.78

RG&E Electric Customer, Tier 1 EAP with Electric Heat

Monthly Consumption of 1,247 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit	Energy Burden	$ Over EB Target	$ Under Limit
$10,000	7.4%	$11.60	$0.00	6.0%	$0.00	$21.13	6.0%	$0.00	$53.86
$15,000	6.0%	$0.00	$13.40	6.0%	$0.00	$46.13	6.0%	$0.00	$78.86
$20,000	6.0%	$0.00	$38.40	6.0%	$0.00	$71.13	6.0%	$0.00	$103.86
$25,000	6.0%	$0.00	$63.40	6.0%	$0.00	$96.13	6.0%	$0.00	$128.86
$30,000	6.0%	$0.00	$88.40	6.0%	$0.00	$121.13	6.0%	$0.00	$153.86
$35,000	6.0%	$0.00	$113.40	6.0%	$0.00	$146.13	6.0%	$0.00	$178.86
$40,000	6.0%	$0.00	$138.40	6.0%	$0.00	$171.13	6.0%	$0.00	$203.86
$45,000	6.0%	$0.00	$163.40	6.0%	$0.00	$196.13	6.0%	$0.00	$228.86
$50,000	6.0%	$0.00	$188.40	6.0%	$0.00	$221.13	6.0%	$0.00	$253.86
$55,000	6.0%	$0.00	$213.40	6.0%	$0.00	$246.13	6.0%	$0.00	$278.86
$60,000	6.0%	$0.00	$238.40	6.0%	$0.00	$271.13	6.0%	$0.00	$303.86
$65,000	6.0%	$0.00	$263.40	6.0%	$0.00	$296.13	6.0%	$0.00	$328.86

Monthly Consumption of 1,500 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Cap	Energy Burden	$ Over EB Target	$ Under Cap	Energy Burden	$ Over EB Target	$ Under Cap
$10,000	12.2%	$51.71	$0.00	8.28%	$18.98	$0.00	6.0%	$0.00	$13.75
$15,000	8.1%	$26.71	$0.00	6.0%	$0.00	$6.02	6.0%	$0.00	$38.75
$20,000	6.1%	$1.71	$0.00	6.0%	$0.00	$31.02	6.0%	$0.00	$63.75
$25,000	6.0%	$0.00	$23.29	6.0%	$0.00	$56.02	6.0%	$0.00	$88.75
$30,000	6.0%	$0.00	$48.29	6.0%	$0.00	$81.02	6.0%	$0.00	$113.75
$35,000	6.0%	$0.00	$73.29	6.0%	$0.00	$106.02	6.0%	$0.00	$138.75
$40,000	6.0%	$0.00	$98.29	6.0%	$0.00	$131.02	6.0%	$0.00	$163.75
$45,000	6.0%	$0.00	$123.29	6.0%	$0.00	$156.02	6.0%	$0.00	$188.75
$50,000	6.0%	$0.00	$148.29	6.0%	$0.00	$181.02	6.0%	$0.00	$213.75
$55,000	6.0%	$0.00	$173.29	6.0%	$0.00	$206.02	6.0%	$0.00	$238.75
$60,000	6.0%	$0.00	$198.29	6.0%	$0.00	$231.02	6.0%	$0.00	$263.75
$65,000	6.0%	$0.00	$223.29	6.0%	$0.00	$256.02	6.0%	$0.00	$288.75

Monthly Consumption of 2,000 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Cap	Energy Burden	$ Over EB Target	$ Under Cap	Energy Burden	$ Over EB Target	$ Under Cap
$10,000	21.7%	$131.06	$0.00	17.8%	$98.33	$0.00	13.9%	$65.60	$0.00
$15,000	14.5%	$106.06	$0.00	11.9%	$73.33	$0.00	9.2%	$40.60	$0.00
$20,000	10.9%	$81.06	$0.00	8.9%	$48.33	$0.00	6.9%	$15.60	$0.00
$25,000	8.7%	$56.06	$0.00	7.1%	$23.33	$0.00	6.0%	$0.00	$9.40
$30,000	7.2%	$31.06	$0.00	6.0%	$0.00	$1.67	6.0%	$0.00	$34.40
$35,000	6.2%	$6.06	$0.00	6.0%	$0.00	$26.67	6.0%	$0.00	$59.40
$40,000	6.0%	$0.00	$18.94	6.0%	$0.00	$51.67	6.0%	$0.00	$84.40
$45,000	6.0%	$0.00	$43.94	6.0%	$0.00	$76.67	6.0%	$0.00	$109.40
$50,000	6.0%	$0.00	$68.94	6.0%	$0.00	$101.67	6.0%	$0.00	$134.40
$55,000	6.0%	$0.00	$93.94	6.0%	$0.00	$126.67	6.0%	$0.00	$159.40
$60,000	6.0%	$0.00	$118.94	6.0%	$0.00	$151.67	6.0%	$0.00	$184.40
$65,000	6.0%	$0.00	$143.94	6.0%	$0.00	$176.67	6.0%	$0.00	$209.40

Monthly Consumption of 2,500 kWh

Annual HH Income	Guarantee Limit set at 100% of Avg. Monthly Consumption			Guarantee Limit set at 125% of Avg. Monthly Consumption			Guarantee Limit set at 150% of Avg. Monthly Consumption		
	Energy Burden	$ Over EB Target	$ Under Cap	Energy Burden	$ Over EB Target	$ Under Cap	Energy Burden	$ Over EB Target	$ Under Cap
$10,000	31.2%	$210.41	$0.00	27.3%	$177.68	$0.00	23.4%	$144.95	$0.00
$15,000	20.8%	$185.41	$0.00	18.2%	$152.68	$0.00	15.6%	$119.95	$0.00
$20,000	15.6%	$160.41	$0.00	13.7%	$127.68	$0.00	11.7%	$94.95	$0.00
$25,000	12.5%	$135.41	$0.00	10.9%	$102.68	$0.00	9.36%	$69.95	$0.00
$30,000	10.4%	$110.41	$0.00	9.1%	$77.68	$0.00	7.8%	$44.95	$0.00
$35,000	8.9%	$85.41	$0.00	7.8%	$52.68	$0.00	6.7%	$19.95	$0.00
$40,000	7.8%	$60.41	$0.00	6.8%	$27.68	$0.00	6.0%	$0.00	$5.05
$45,000	6.9%	$35.41	$0.00	6.1%	$2.68	$0.00	6.0%	$0.00	$30.05
$50,000	6.2%	$10.41	$0.00	6.0%	$0.00	$22.32	6.0%	$0.00	$55.05
$55,000	6.0%	$0.00	$14.59	6.0%	$0.00	$47.32	6.0%	$0.00	$80.05
$60,000	6.0%	$0.00	$39.59	6.0%	$0.00	$72.32	6.0%	$0.00	$105.05
$65,000	6.0%	$0.00	$64.59	6.0%	$0.00	$97.32	6.0%	$0.00	$130.05