U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-5000

OFFICE OF PUBLIC AND INDIAN HOUSING

Special Attention of:
Public Housing Agencies;
Office Directors of Public Housing;
Directors

Notice PIH 2022-34

Issued: November 28, 2022

This Notice remains in effect until amended, superseded, or rescinded.

Cross Reference: *24 CFR § 990.185, 24 CFR § 965 Subpart C, 2 CFR Part 200, Notice PIH-2011-36 (HA), and Notice PIH 2018-20, HUD Handbook 7460.8 REV 2 (2/2007).*

SUBJECT: Guidance on the Rate Reduction Incentive in Public Housing

1. Purpose

This Notice serves as guidance to Public Housing Authorities (PHAs) on the use and eligibility of the Rate Reduction Incentive (RRI). This Notice supersedes and replaces Notice PIH-2019-24 (HA) and supplements information in the current Energy Performance Contracting (EPC), Utility Partnership Program (UPP), and the Operating Fund grant processing notices.

2. Applicability

This Notice applies to all PHAs that operate a public housing program and provides guidance under the Public Housing Operating Fund program pursuant to the U.S. Department of Housing and Urban Development (HUD) regulations at 24 CFR part 990.

Moving to Work (MTW) housing authorities with Alternative Operating Subsidy formulas are only eligible to claim financial incentives for rate reductions if their Alternative Operating Subsidy formula explicitly permits it or that the Alternative Operating Subsidy Formula does not modify the Utility Expense Level portion of the Operating Subsidy formula found in 24 CFR part 990.

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4. Background

The RRI is a financial incentive for PHAs that pursue special and significant efforts beyond what is required by statute and/or regulation to reduce their utility rate. The PHA's action must exceed the activities required by statute and/or regulation. Pursuant to HUD regulation 24 CFR § 990.185(b), "If a PHA takes action beyond normal public participation in rate-making proceedings, such as well-head purchase of natural gas, administrative appeals, or legal action to reduce the rate it pays for utilities, then the PHA will be permitted to retain one-half the annual savings realized from these actions."

The RRI provides additional Operating Fund grant formula eligibility to a PHA that undertakes a special and significant action to reduce its utility rate. A PHA must undertake an eligible action that results in the PHA paying a lower utility rate to be eligible for an RRI. The lower rate cannot be a result of factors that do not require the PHA to take an action and/or are beyond a PHA's control including, but not limited to, market changes, legislative changes, rate changes for all customers, or consuming energy at a different time of day. A coincidental change in the effective rate paid by the PHA from one year to the next is not always a result of a PHA action and therefore is not eligible for an RRI.

The RRI is not an incentive for complying with required procurement practices, conducting maintenance, and/or reducing utility consumption. The RRI is a tool to incentivize PHAs to lower the overall utility costs of the public housing program. In general, pursuant to 24 CFR § 990.185, the RRI evenly divides the financial benefit of the lower utility rate between the PHA and HUD (i.e., 50 percent to the PHA and 50 percent to HUD). RRI financial benefits, which are provided through the Public Housing Operating Fund grant, may be used for any eligible Operating Fund grant activity allowable under Section 9(e) of the United States Housing Act of 1937.

5. Overview of Changes

This Notice represents a significant update to prior Notices on the RRI involving a reorganization of the original content, clarification on the RRI approval process, and the addition of supplemental guidance. The goal of this update is to give the reader a comprehensive understanding of the RRI, while creating a reference document that offers clear and consistent information. This version includes some important clarifications, refinements, and changes to policy. In particular:

- This Notice clarifies the submission and documentation requirements for a new RRI request submission versus the ongoing documentation requirements for a multi-year RRI approval. Additional sample language and guidance is included to provide more comprehensive examples of these key submission requirements in the main body of the Notice and the Appendices.
- This Notice re-establishes an RRI-for-EPC savings calculation methodology where an RRI is executed in conjunction with an EPC. This methodology allows for use of the pre-EPC baseline utility consumption level established in the current EPC approval letter to calculate annual savings to mitigate the impact of the RRI action (and resultant reduced utility rate) on the EPC cash flow. Consistent with prior RRI Notices, the PHA may be eligible to claim 100% of eligible savings in this instance. Additionally, this Notice clarifies that the actual utility rate and default utility rate used in both the traditional RRI savings calculation, and the RRI-for-EPC calculation must reflect rates for the 12-month period from July 1 to June 30 that is prior to the first day of the applicable Funding Year.
- This Notice clarifies HUD's review and approval process once a PHA has submitted RRI documentation, from initial preliminary determination of eligibility to issuance of a final RRI Approval/Denial letter. PHAs are not able to claim an RRI until they have received an RRI approval letter from HUD for the relevant Funding Year.
- If a PHA has a multi-year RRI approval in place, unless the PHA opts not to participate in the RRI during an applicable Funding Year, the PHA must submit savings calculations annually for all AMPs approved for the RRI action, including AMPs with negative calculated savings to reflect total net savings for the RRI action across all participating AMPs.
- When a PHA enters into a new contractual agreement under an eligible RRI scenario, even if the action impacts the same utility and set of AMPs as a previously approved RRI action, this is considered a new RRI action and requires a new RRI request submission and Departmental approval.
- Additional guidance is included for other common RRI actions, such as withdrawing an RRI request, opting out of participating within a multi-year RRI approval, and submitting negative savings at the AMP level.
- The notice clarifies procurement requirements related to contract terms.

6. Acronyms and Abbreviations

ACC	Annual Contributions Contract

AMP	Asset Management Project
BTU	British Thermal Unit, a measure of energy
CCF	100 Cubic Feet, common unit of natural gas or water
CFFP	Capital Fund Financing Program
CFR	Code of Federal Regulations
EPC	Energy Performance Contracting
FO	Field Office
HUD	Department of Housing and Urban Development
kWh	Kilowatt hours (unit of electricity)
M&V	Measurement and Verification
MTW	Moving to Work
OFFP	Operating Fund Financing Program
OGC	Office of General Counsel
OPH	Office of Public Housing
PHA	Public Housing Authority
PPA	Power Purchase Agreement
PV	Solar Photovoltaics (generate electricity from solar energy)
RBCL	Rolling Base Consumption Level
RRI	Rate Reduction Incentive
UEL	Utility Expense Level
UPP	Utility Partnership Program

7. Definitions

Term	Definition
52722, Form HUD-52722, or HUD-52722	Form HUD-52722 – "Operating Fund Grant: Calculation of Utilities Expense Level (UEL) PHA-Owned Rental Housing." This form is used to calculate the Utilities Expense Level component of eligibility for Operating Funds pursuant to 24 CFR §§s 990.170 – 990.180.
Actual Consumption	Total amount of a utility consumed, such as kWh of electricity or "therms" of natural gas, during the reporting period. The best source of actual consumption for PHA reporting is from utility bills or invoices.
Actual Cost	Total amount paid by the PHA for a given utility. In addition to the price of the actual commodity, this typically includes the transmission and distribution of the commodity and other fees charged by the utility. The best source of total cost information is from utility bills or invoices.
Actual Utility Rate	For purposes of calculating Utilities Expense Level (Form HUD 52722), the actual average rate from the most recent 12-month period that ended June 30th prior to the beginning of the applicable funding period. The rate will be calculated by dividing the actual utility cost by the actual utility consumption, with consideration for pass-through costs (e.g., state, and local utility taxes, tariffs) for the time period specified in this paragraph. Additionally, for purposes of calculating RRI savings, utility rate may also

	refer to a component of the overall utility rate for which the PHA has negotiated a cheaper rate (e.g., for the energy/commodity portion of a PHA's utility rate only).
Annual Reporting Requirements	Annual Reporting Requirements are enumerated in HUD Approval Letter.
Baseline Consumption	The utility consumption amount that would have been expected if ECMs had not been implemented. Baseline consumption is used to calculate RRI savings in cases where an RRI action has been approved in conjunction with an EPC. This value is typically included in the EPC approval letter.
Default Cost	Total amount the PHA would have paid in the reporting period if it had not taken any RRI action. The total default cost should include the additional costs associated with the transmission and distribution of the commodity and other fees charged by the utility.
Default Utility Rate	The utility rate that the PHA would have paid in the reporting period if it had not taken any RRI action. The default rate of the actual commodity should include the additional costs associated with the transmission and distribution of the commodity and other fees charged by the utility.
Deregulated Market	Utilities in deregulated markets are prohibited from generation and transmission ownership and are only responsible for distribution (lower voltage electricity delivered to point of use), operations, maintenance, and billing ratepayers. As a result, customers located within these deregulated areas have the option to purchase the commodity or supply of energy from a different provider, which can result in a cheaper rate for the commodity.
ECMs (Energy Conservation Measures)	ECMs are defined by the Department of Energy, FEMP and by HUD as the measures that improve energy efficiency, are life cycle cost effective, and involve energy conservation, cogeneration facilities, renewable energy sources, improvements in operations and maintenance, or retrofit activities. HUD defines energy efficiency as including water as well as energy.
EPC (Energy Performance Contract)	Energy Performance Contract – An energy conservation program financed with non-Department funds, that is the subject of a written approval by HUD pursuant to 24 CFR part 965 Subpart C and 24 CFR 990.185.
EPC Baseline Consumption	The utility consumption at a relevant site or AMP prior to the installation of ECMs. For all incentives, the EPC Baselines are identified in the EPC approval letters.
EPC Cash Flow	The EPC cash flow provided in the EPC approval letter is a method of calculating financial results using certain projections or presumptions. The EPC cash flow covers the period of the HUD incentive term from year 1 till end of term (20 years max). It compares EPC savings less total EPC project costs to show excess savings and includes finance rate, estimated inflation rate and shows the percentage of savings used to pay Project Costs.

EPC Incentive	The three EPC incentives are: Add-On Subsidy (AOS), Frozen Rolling Base (FRB), and Resident Paid Utilities (RPU).
ESCO (Energy Services Company)	An Energy Services Company (ESCO) is an entity that will develop, design, and build projects that save energy, including energy engineering firms as well as other energy engineering consultants hired by the PHA to undertake part, or all, of an energy/utility project.
Funding Year	The Calendar Year for which an Operating Fund grant is provided.
HUD Approval Letter	An official letter issued by the person with approval authority to a PHA that approves the RRI. HUD's approval of the RRI is subject to the conditions and criteria outlined in the letter.
M&V (Measurement and Verification)	Measurement and verification (M&V) is the approach used to calculate and document annual EPC energy savings.
M&V Report	An M & V Report is a written accounting of EPC Project Costs, consumption savings, and cost savings that PHAs are required to submit annually to HUD.
Moving To Work	A demonstration program for PHAs that provides them the opportunity to design and test innovative, locally designed strategies that use Federal dollars more efficiently, help residents find employment and become self-sufficient, and increase housing choices for low-income families. MTW allows PHAs exemptions from many existing public housing and voucher rules and provides funding flexibility with how they use their Federal funds.
Operating Fund	The grant program established pursuant to Section 9(e) of the U.S. Housing Act of 1937 as amended, 24 CFR part 990, and annual appropriation acts.
Operating Fund Formula	The formula used to determine Operating Fund eligibility, established by negotiated rulemaking as mandated by Section 9(e) of the U.S. Housing Act of 1937. For approved EPCs, EPC incentives are elements in the Operating Fund Formula.
Operating Subsidy	Grant amounts provided to public housing projects pursuant to the Operating Fund program.

Operating Subsidy Tools	The electronic HUD-52722 and/or HUD-52723 which, in combination, calculate Operating Subsidy eligibility and are submitted for each project annually by the PHA
Power Purchase Agreement	A contract between two parties, one which generates electricity (the seller) and one that purchases electricity (the buyer). The PPA defines the commercial terms for the sale of electricity between the two parties. A PPA that is approved by HUD and results in net savings for the PHA may be eligible for the RRI.
Rate Reduction Incentive	A financial incentive for PHAs that pursue special and significant efforts beyond what is required by statute and/or regulation to reduce their utility rate. The PHA's action must exceed the activities required by statute and/or regulation (24 CFR § 990.185(b)).
Reporting Period	The 12-month period for which actual utility consumption is measured each year. Consistent with calculation of the UEL, the RRI reporting period is the 12-month period from July 1 to June 30 that is prior to the first day of the applicable Funding Year.
Standby Charge	Convenience fee charged by electric company for the electricity generated on-site. This covers the local power company's need to standby and provide backup power if the renewable energy system goes offline. Not all utility companies charge this fee. Utility companies that charge this fee will use different methods for calculating it.
UEL (Utility Expense Level)	The Utility Expense Level (UEL) is the PHA paid utilities component of the Operating Fund Formula pursuant to §§ 990.170-180 The UEL is the output of the HUD Form 52722.
Wellhead Purchase	According to the American Gas Association, the definition of wellhead price is "the cost of gas as it comes from the well excluding cleaning, compression, transportation, and distribution charges." (https://www.aga.org/natural-gas/glossary/)

8. RRI Approval Process

A PHA seeking an RRI must submit a request to HUD for review and approval. The PHA's submission must be approved before the PHA is eligible to include RRI savings in its HUD Form 52722. Previous approval of an RRI is not a guarantee of future approval. A PHA seeking approval of an RRI is subject to Section 9(e) of the United States Housing Act of 1937, HUD's regulations at 24 CFR part 990, and the terms and guidelines of the current RRI Notice. Any time limits for RRI eligibility will begin in the Operating Subsidy Funding Year following the RRI approval. The process for the review and approval of an RRI is as follows:

Step 1: PHA Eligibility Submission

To determine eligibility, a PHA interested in pursuing an RRI is required to submit a request to its local Field Office (FO) and the energy policy mailbox (PIHEnergyBranch@hud.gov) for review.

The request for eligibility must be submitted no later than August 30th prior to the upcoming funding year for which the RRI would be applicable to determine eligibility of the PHA.

> For example, the submission request for an RRI for the 2023 Funding Year (January 2023 – December 2023) must be received by HUD no later than August 30, 2022.

Failure to meet this deadline will result in denial of the RRI request. At a minimum, each RRI request must include the following information (see Appendix I for a sample PHA submission):

1. PHA Name and PHA code;
2. Asset Management Project (AMP) number for each AMP included in the proposed RRI;
3. A brief description of the action the PHA undertook to reduce the utility rate and supporting documentation;
4. An explanation of how the PHA will calculate savings (see Appendix II for more information);
5. Identification of the incentive the PHA will claim, whether it is 50 percent or 100 percent of the actual savings (see Section 10 Interaction with an EPC for more information); and
6. Identification of whether the PHA is seeking single or multi-year approval.

Submitted requests that are incomplete or insufficient by the deadline will also be denied. PHAs must submit a separate application for each action for each utility. PHAs are encouraged to submit an RRI eligibility request ahead of the stated deadline. For actions that impact more than one AMP, the PHA may submit one application. Supporting documentation to submit with the eligibility request includes, but is not limited to:

- Fully executed agreement, such as a supply or net metering contract with the utility provider, which typically includes terms, contract rates/unit prices, and included properties/accounts.
- If applicable, the current EPC approval letter.
- If applicable, Departmental Field Office approval documentation for contracts that exceed five years in length.

Multi-Year Approval

For PHA's with an existing multi-year RRI approval in place, if there are no changes to the information contained in the original request, the PHA does not need to submit a new RRI eligibility request for the duration of the RRI approval but must submit savings calculations and documentation annually for Departmental review (see Step 4: Reporting Annual Savings). The PHA must continue to submit savings calculations for all AMPs approved for the RRI action, including AMPs with negative savings, unless the AMP is no longer eligible for the Operating Fund grant. When a PHA enters into a new contractual agreement under an eligible RRI scenario, even if the action impacts the same utility and set of AMPs as a previously approved RRI action, this is considered a new RRI action and requires a new RRI request submission. In this instance, the PHA must submit the information listed above (a new eligibility request) by August 30th prior to the upcoming Funding Year for which the RRI would be applicable even if the information resembles a previous submission and/or action.

Step 2: Departmental Review of Eligibility

HUD will review the eligibility submission and supporting documentation to determine preliminary RRI eligibility based on the completeness of the submitted information, whether the action the PHA undertook is eligible, and whether the request was submitted on time. The review process will not start until all supporting documentation has been received. During the review process, HUD may contact the PHA to request additional documentation or clarification to determine preliminary RRI eligibility. PHAs must respond to additional documentation and/or clarification requests by date specified by HUD or within ten (10) business days.

Step 3: Departmental Eligibility Determination

Once HUD completes its review of the eligibility submission, HUD will make an initial determination of whether the PHA has undertaken an eligible RRI action and will notify the PHA by email from the PIHEnergyBranch@hud.gov. Please note: this eligibility determination is not the final approval of an RRI. A PHA must submit clear documentation of the savings analysis and calculations for HUD to make a final determination regarding the eligibility of the RRI action and the amount of the RRI benefit for the applicable Funding Year (See Step 4: Reporting Annual Savings). If HUD determines the action is not eligible, HUD will process a denial letter for the PHA. PHAs that receive a denial letter from HUD have a right to appeal the denial within ten (10) business days of the denial letter date.

Step 4: Reporting Annual Savings and Departmental Final Review

HUD's final approval of RRI eligibility and amount of the RRI benefit for the applicable Funding Year is based on the PHA's submission of its savings calculations which document the total net savings the PHA realized from the RRI action during the reporting period at the AMP level. Regardless of whether the PHA has submitted a new RRI eligibility request or has an existing multi-year RRI approval in place, a PHA must submit documentation of the savings annually to its FO and the PIHEnergyBranch@hud.gov mailbox no later than the September 30th prior to the upcoming Funding Year.

> For example, the savings calculations submission for an RRI for the 2023 Funding Year (January 2023 – December 2023) must be received by HUD no later than September 30, 2022.

If a PHA does not meet this submission deadline, they will not be eligible to claim an RRI incentive for the applicable Funding Year, regardless of whether they received Departmental preliminary approval for the action or have a multi-year RRI approval in place. Submitted calculations that are incomplete or insufficient by the deadline will also be denied.

At a minimum, the RRI savings calculation submission must include the following information:

- Clearly identifiable and traceable calculations that illustrate and verify annual net savings by AMP. This includes, as applicable based on the type of action and savings calculation methodology employed, the total savings, default costs, actual costs, default utility rate, actual utility rate, and actual consumption during the reporting period (July 1 – June 30 prior to the applicable Funding Year).
- Copies of 2-3 sample utility invoices/bills cross referenced with rates, costs, consumption, and dates for any AMPs considered in this submission.

The preferred reporting format for the calculation submission is Microsoft Excel so that numbers are legible, and calculations are more easily traceable during HUD's review. For additional guidance on allowable calculations methods and documentation examples, see Appendix II. The review process will not start until all supporting documentation has been received. During the review process, HUD may contact the PHA to request additional documentation and/or clarification to review and validate the savings calculation submission. PHAs must respond to additional documentation and/or clarification requests dates specified by HUD or within ten (10) business days.

RRI Withdrawal

If, after submission of a new RRI eligibility request, the PHA wishes to withdraw its request for eligibility, the PHA should notify the FO and the PIHEnergyBranch@hud.gov inbox of their desire to withdraw. HUD will acknowledge the withdrawal via email and no further action is required.

If a PHA has an existing multi-year RRI approval in place and does not wish to participate in an eligible Funding Year in the event, for example, that the action does not produce a net savings, the PHA should notify their FO and the PIHEnergyBranch@hud.gov inbox that they will not include an RRI incentive in their operating subsidy submission.

In either of the above examples, the PHA will not be precluded from participating in future RRI eligibility provided it follows the instructions included in this Notice.

Step 5: Departmental Final Approval

Once HUD completes its review and validation of reported savings, the PHA will receive a signed approval letter from HUD and is then eligible to claim an RRI on its HUD Form 52722 on the "Rate Reduction Incentive" line (line no. 23) for each approved AMP. The approval letter will identify the number of years the PHA is eligible to claim the RRI for this action. RRI actions that require a contract are not eligible to receive RRI incentives beyond the term of the contract. PHAs that receive an approval letter from HUD are eligible to claim RRI savings in their annual Operating Subsidy request provided that the action continues to result in a net savings to the PHA. Savings must be reported in the HUD Form 52722 by the initial submission date as identified in the Operating Subsidy Notice for each eligible Funding Year. As a reminder, after HUD determines that a PHA took an eligible action (Step 3 above) and the action has received full approval from HUD, PHAs only need to submit documentation of the savings in subsequent years. If there are any changes from the original approval letter, such as a new contract or a new contractor, then the PHA must submit a new eligibility request (repeat Steps 1-3 above).

9. <u>Activities That May Be Eligible for an RRI</u>

Activities listed in this section may be eligible to receive an RRI if the action results in a lower utility rate for the PHA, subject to Departmental approval under the terms of this Notice. HUD will not consider an action eligible for an RRI if the action violates a current policy, regulation, or statute, or inhibits a PHA from complying with a current policy, regulation, or statute.

Contract Restrictions: Contracts shall not exceed a period of five years, including options for renewal or extension, as stated in Chapter 10.8 of The Procurement Handbook for Public Housing Agencies (HUD Handbook 7460.8 REV 2, dated 2/2007).

Described in more detail below, a FO may approve contracts more than five years if it determines there is no practical alternative. HUD will not approve RRI actions with contracts more than five years that have not received explicit FO approval in writing. PHAs must include the FO approval letter for the executed contract as part of their RRI eligibility submission. FOs must consult with the Office of Public Housing Program's (OPHP) Energy Branch (EB) where such contracts related to energy include RRIs.

An RRI cannot be combined with any public housing financing (e.g., Capital Fund Financing Program[1], Operating Fund Financing Program[2], Section 30 EPC[3], Public Housing Mortgage Program[4]) without Departmental approval of the financing.

The scenarios below are not an exhaustive list or a guarantee of approval for RRI eligibility or payment.

Scenario 9-1: Special rate negotiated by and for the PHA

- The PHA actively works with the local utility company to create a special rate for the PHA. The result is a reduced rate or accommodation not available to the public, low-income households, or subsidized housing in general. The action taken by the PHA must extend beyond simply writing letters, attending public meetings, or completing administrative paperwork.
- The PHA may be eligible to receive an RRI approval for up to five years for each negotiation.

Scenario 9-2: Wellhead purchase of natural gas

- The PHA negotiates a natural gas rate at the wellhead[5].
- The RRI savings must reflect the impact to the wellhead portion of the bill only. In this scenario, HUD will only pay an incentive on the savings associated with the wellhead portion of the utility bill. Most commodity purchases are inclusive of the wellhead price as well as fuel processing and transportation charges.
- The PHA may be eligible to receive an RRI approval for up to five years for each procurement action.

Scenario 9-3: Power Purchase Agreement (PPA) using a third-party energy supplier

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[1] 24 CFR part 905, https://www.hud.gov/program_offices/public_indian_housing/programs/ph/capfund/cffp

[2] https://www.hud.gov/sites/documents/OPFUND-FINANCING-GUIDE.PDF

[3] Energy Performance Contract Section 30 Reviews and Approvals Guidebook, https://www.hud.gov/sites/documents/SECTION30GUIDEBOOK.PDF

[4] PIH Notice 2011-30 (HA): PHA Mortgaged Projects: Procedures for Section 30 Mortgage Transactions, https://www.hud.gov/sites/documents/PIH2011-30.PDF

[5] According to the American Gas Association, the definition of wellhead price is "the cost of gas as it comes from the well excluding cleaning, compression, transportation, and distribution charges." (https://www.aga.org/natural-gas/glossary/)

- The PHA participates in a power purchase agreement (PPA), where a third party finances, owns, maintains, and operates an energy generating system and the PHA purchases the output (e.g., electricity, steam, or chilled water). In this scenario, the PHA receives a reduced utility rate for the output, typically through invoice credits or via a fixed utility rate.
- If a PHA elects to pursue a PPA and the contract term exceeds five, then the contract must be subject to a procurement exception review (under 2 CFR part 200), with approval by the FO required. FOs must consult with the OPHP EB in reviewing such requests. Generally, HUD will not approve contracts more than five years, but may consider contracts longer than five (5) years when:
    - The contract is executed in conjunction with an EPC, or an EPC extension[6], for a term of up to twenty (20) years; and/or
    - There is no practical alternative to the procurement action and the action is found to have been conducted in a manner providing full and open competition as described in 2 CFR § 200.319 (a)).
- If a PHA receives FO approval to enter into a PPA contract in excess of five years, the approval is only for entering into that contract and not an automatic approval of an RRI. The PHA must separately request Departmental approval of the RRI and should include documentation (e.g., FO approval letter) in their RRI eligibility submission.
- If the PHA receives contract approval, and the associated RRI is also approved, the PHA may be eligible to receive an RRI approval for the life of the contract, which cannot exceed 20 consecutive years.

Scenario 9-4: Energy efficiency investments that lead to lower utility rates

- Some utilities offer lower rates for customers that make energy efficiency investments or upgrades, including, but not limited to, boilers, windows, or toilets.
- If the investment involves the physical installation of new equipment as a requirement to qualify for a lower rate, then the PHA may be eligible to receive an RRI for the lower utility rate but not any reductions in utility consumption (e.g., kilowatt hours (kWh), 100 cubic feet (CCF), gallon).
- Energy efficiency investments that reduce utility consumption and reduce the actual utility rate simply by eliminating or reducing the amount of consumption tied to a higher marginal rate are not eligible under this scenario.[7]
- RRIs do not apply to physical investments that result in a property using different fuels, which, for example, could include a permanent switch from natural gas to electric heat to be eligible for a reduced electric rate.
- The PHA may be eligible to receive an RRI approval for up to three years for each investment[8].

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[6] See 24 CFR § 990.185(a) regarding EPC term extensions

[7] "*Utility rate* means the actual average rate for any given utility for the most recent 12-month period that ended the June 30th prior to the beginning of the applicable funding period." 24 CFR § 990.115

[8] The Operating Fund grant formula determines eligibility based on the current utility rate multiplied by the payable consumption level. The payable consumption level factors in the current consumption and the rolling base consumption level (RBCL). When a PHA reduces its consumption, the PHA is able to retain 75 percent of the difference between the current consumption and the RBCL (24 CFR § 990.170). The HUD Form 52722 refers to this as the Utility Consumption Incentive or the 75 percent/25 percent Split. This allows the PHA to retain 150

Scenario 9-5: Investments to allow for fuel switching capability to participate in an interruptible utility rate

- Some utilities offer lower rates for customers that agree to participate in fuel switching programs in which customers are required to switch fuels at the direction of their local utility company. Participation in the program requires a PHA to temporarily (cannot be permanent) switch between fuels. Fuel switching occurs usually in response to disruptions in the fuel supply or changes in market conditions. For example, a utility company may require a PHA to switch from natural gas to fuel oil during a temporary price surge.
- If fuel switching capability requires the installation of new equipment, then the PHA is eligible to receive an RRI. If the PHA does not install new equipment, then it will not be eligible to receive an RRI.
- The PHA may be eligible to receive an RRI approval for up to three years for each investment.

Scenario 9-6: Commodity purchases of regulated utilities in a deregulated market that result in a lower utility rate

- This RRI activity does not apply to non-regulated fuels including, but not limited to, fuel oil, diesel fuel, propane, or kerosene. Since there is no default provider, the PHA is always required to follow Federal competitive procurement procedures (2 CFR part 200) when purchasing these fuels.
- Each PHA property has a default utility provider that maintains the local electricity lines and/or natural gas distribution system. The default provider operates as a regulated monopoly and is the only provider physically capable or legally allowed to provide utility delivery services to a PHA property.
- The charge for this service is listed on the utility bill as either the transportation and/or delivery portion of the electricity or natural gas bill.
- PHAs do not take specific steps to procure transmission and distribution utility services from the default utility provider as there is only one provider capable and legally allowed to provide service to the PHA property.
- In addition to utility service delivery, the default provider also provides the energy supply or commodity.
- When a customer initiates utility service with the customer's local utility provider, the local utility provider is the default commodity provider. PHAs do not need to undergo a procurement action to purchase commodity from the default provider when they initiate utility service.
- PHA properties that are physically located in a deregulated utility market have the option to procure the energy supply or commodity from a provider other than their default local provider. A PHA that chooses to exercise this option must follow Federal procurement guidelines (2 CFR part 200 and HUD Handbook 7460.8 REV 2, dated 2/2007). If a PHA

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percent of the consumption savings incentive spread over 3 years (assuming no consumption variation from year to year). PHAs that pay a utility bill that does not reflect actual consumption (e.g., cost per dwelling unit rather than cost per gallon) are not eligible to utilize the Utility Consumption Incentive and therefore not able to capture these savings when a capital investment results in a lower utility consumption. Therefore, the PHA may be eligible to claim the RRI for up to three years to capture these savings, provided the actions and savings meet the criteria of this Notice.

exercises this option and reduces its utility rate, then that PHA may be eligible for an RRI. The PHA may be eligible to receive an RRI approval for up to five years for each procurement action.
- As a best practice, a PHA that chooses to procure a commodity separately from its default provider is encouraged to continuously review the financial costs and benefits of the procurement action to ensure that the procurement action continues to be financially advantageous to the PHA.

Scenario 9-7: Active commodity trading
- Active commodity trading, or participating in a reverse auction, is where the PHA, or an agent on its behalf, purchases electricity or natural gas on the spot market at regular intervals throughout the year. Unlike a commodity purchase that typically happens once a year, a reverse auction may require the PHA, or an agent on its behalf, to frequently monitor energy costs to ensure the best rate. Purchases in a reverse auction may range from short-term intervals of a few days up to multiple years.
- The PHA may be eligible to receive an RRI approval for up to five years for each procurement action.

Scenario 9-8: On-Site renewable energy
- If a PHA installs a renewable energy system, the PHA may include the electricity generated on-site for the purposes of calculating the blended rate. See Appendix III for a sample project, including an example methodology of how to calculate the savings.
- PHAs choosing to install on-site renewable energy are encouraged to investigate the financial benefits, risks, and penalties when evaluating whether to invest in such projects.
- If the renewable energy investment results in higher electricity costs, then the PHA is not eligible for the RRI.
- The renewable energy RRI is not eligible to claim the 100 percent rate savings, only 50 percent, even if proposed for an RRI with a concurrent EPC. (24 CFR § 990.185(b)).
- The PHA may be eligible to receive an RRI for the life of the equipment, not to exceed 20 years.

Scenario 9-9: Other
- Additional RRI scenarios proposed by PHAs will be reviewed on a case-by-case basis.

10. <u>Actions That Are Not Eligible to Receive An RRI</u>

The following are some examples of activities that do not qualify as eligible to receive an RRI. This list is not exhaustive and is provided as a general guide for evaluating eligible activities.

Scenario 10-1: Energy investments that lower utility consumption but not the rate (unit cost)

Justification: If the investment reduces energy consumption, the PHA may be eligible to receive an incentive under 24 CFR § 990.170(c) as automatically calculated in the HUD Form 52722, but not an RRI. Energy and water investments using third party funds may be eligible for incentives when they are included in an approved EPC. For more information on EPCs, see 24 CFR § 990.185(a) and/or the current EPC Notice.

Examples of ineligible activities:

- Energy or water conservation investments that may result in reduced utility consumption but not a reduced utility rate including, but not limited to, replacing, repairing, or upgrading existing equipment such as boilers, insulation, windows, or toilets.
- Investments in energy technology that use fuel more efficiently including, but not limited to, cogeneration, combined heat and power, trigeneration, or geothermal heat pumps.
- Routine maintenance to repair faulty equipment and/or leaky pipes.

Scenario 10-2: Selecting the best available utility rate

Justification: If a local utility company offers multiple rate options from which the PHA may be eligible, then the PHA is expected to select the utility rate that is most financially advantageous to the PHA and/or HUD.

For example, a PHA may have the option of choosing to pay $0.12/kWh for a standard commercial rate or $0.10/kWh for an affordable housing rate. It is expected that the PHA will choose the cheaper rate. When the PHA does this, it is considered a good business decision rather than a special or significant action worthy of an RRI.

Examples of ineligible activities:

- Selecting a lower rate that is available to the public, even if there is an application or income verification process.
- Assisting tenants in applying for a lower rate.
- Participating in an interruptible rate program except as explained in Scenario 8-5.
- Switching into, or out of, a time-of-use rate[9].

Scenario 10-3: Combining or removing utility meters in a manner that prohibits the PHA from individually metering tenant level consumption

Justification: Removing or consolidating individual meters inhibits a PHA from complying with the requirements of 24 CFR part 965 subparts D & E (§ 965.401- § 965.508), which requires PHAs to individually meter utility consumption where technically feasible and appropriate.

HUD may consider a negotiated rate for meter consolidation provided that the PHA metering remains in compliance with Departmental regulations for assigning tenant responsibility. For example, a PHA may install a master utility meter upstream from individual meters and convert the unit level meters from individual utility accounts to PHA operated CheckMeters. In a CheckMeter system, a PHA must bill tenants for excess consumption. In this case, the PHA may be eligible to receive the RRI, subject to Departmental approval, provided that the action lowers the cost to the PHA and/or HUD.

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[9] Time-of-use rates charge different rates based on the time of day, season, or type of day (weekday or weekend). In an electric time-of-use rate, the unit cost of electricity ($/kWh) costs more during peak (daytime) hours and less during off-peak (nighttime) hours.

Scenario 10-4: Fuel switching to obtain a better rate when new equipment is not required

Justification: If new equipment purchases are not required, then these actions amount to energy conservation activities and/or compliance with the requirement to select the most favorable utility rate.

Examples of ineligible activities:

- Using an on-site generator to reduce electricity consumption.
- Converting electric heat to natural gas because natural gas is cheaper per British Thermal Unit (BTU, a unit of energy).
- Switching between natural gas and oil when it is price advantageous to the PHA and/or HUD, except as described in Scenario 9-5.

11. Interaction with an EPC

RRIs executed at the same time as an EPC are eligible to retain up to 100 percent of the savings (rather than 50 percent of the savings with the RRI alone) during the EPC repayment period when the EPC and RRI impact the same AMP and utility. The requirements for a PHA to be eligible to retain 100 percent of the RRI savings are as follows:

The PHA must be eligible for both EPC incentives and RRI incentives (1) at the same AMP, (2) for the same utility, and (3) in the same funding period. For an EPC and an RRI to be considered executed at the same time, the RRI action needs to be submitted to HUD for review after the PHA submits the EPC package to HUD for review and before HUD approves the EPC. The PHA's RRI submission must state that it is requesting a 100 percent RRI benefit because it is being executed in conjunction with an EPC. A PHA's EPC submission must state that the PHA is pursuing an RRI in conjunction with an EPC. Both the RRI and EPC approval letters from HUD must indicate that the PHA is pursing both approvals in conjunction with each other. The PHA should submit to Energy Branch (PIHEnergyBranch@hud.gov) PHA Name, PHA Code, Asset Management Number for AMP (Project) included in the proposed RRI and EPC, a brief description of the action that the PHA undertook to reduce the utility rate and supporting documentation. To receive 100% savings for the RRI Action, the documentation for the RRI Action (e.g. executed contract, default rate documentation, and savings calculations) should be submitted by August 30th before the year of the first EPC Incentive payment. See below for clarifications on some common scenarios.

- **Scenario 11-1**: If a PHA executes a Departmental approved EPC at two (2) of its three (3) AMPs and simultaneously executes a Departmental approved RRI at all 3 AMPs, only the 2 AMPs included in the EPC may be eligible to retain 100 percent of the savings. The third AMP that is not included in the EPC may be eligible to retain 50 percent of the savings.

- **Scenario 11-2**: If a PHA has a Departmental approved EPC that includes both electricity and water savings and simultaneously executes a Departmental approved RRI for natural gas, the PHA may be eligible to retain 50 percent of the savings because the EPC and RRI impact different utilities.

- **Scenario 11-3**: Eligibility to retain 100 percent of the RRI savings is only applicable when the PHA is also receiving EPC incentives. Therefore, the PHA is only eligible to retain 50 percent of the savings during the construction period, or if the EPC benefits end for any reason.

- **Scenario 11-4:** If a PHA executes an RRI and an EPC at the same time and the EPC has a payback term longer than the RRI eligibility, and the PHA receives approval of another RRI action after the expiration of the previous RRI, then the PHA may be eligible to extend RRI eligibility at 100 percent provided that:
  - the new RRI is similar in nature to the previous RRI;
  - the new RRI meets the requirements identified in the current RRI Notice;
  - the new RRI took place at the same AMP for the same utility as the expired RRI; and
  - the RRI and EPC both include incentives at the same AMP for the same utility.

If the RRI renewal meets the above criteria, then the PHA may be eligible to retain 100 percent of the savings, rather than 50 percent, while the AMP is receiving both EPC and RRI incentives. If the EPC repayment periods ends before RRI eligibility ends, then the PHA is only able to retain 50 percent of the savings for the approved RRI that is in place after the EPC repayment period ends. The PHA does not need to use the same contractor as was used in the previously approved RRI as a condition of retaining 100 percent eligibility. The intent of allowing flexibility for extensions is to ensure that the PHA is continually seeking the best value in contract selection.

For example:
A PHA executed an EPC with a 10-year payback and simultaneously executed a commodity contract for electricity at all sites included in the EPC. The commodity contract covered electricity purchases for three (3) years. For each of the three years, HUD determined that the PHA was eligible for an RRI and was able to retain 100 percent of the savings. At the end of the commodity contract the PHA procured a new commodity contract for electricity for one year that covered the same AMPs.

Based on the information above, HUD determined that the PHA was eligible to retain 100 percent of the RRI savings for this additional year.

a. The requirement that the RRI and EPC be completed within a specified timeframe, the submission requirement, and Departmental approval letter requirements apply only to EPCs and RRIs approved after the date of this Notice. Departmental determinations as to the percentage of an RRI that can be claimed for existing EPC and RRI approvals made pursuant to prior RRI Notices will remain in effect. There is no requirement for the PHA to use the same contractor for both transactions.

b. The PHA must submit savings calculations each year per this Notice to receive eligibility for the RRI benefit. See Appendix II for the acceptable method for calculating savings when the RRI is executed in conjunction with an EPC.

12. <u>Further Information</u>

For additional information or questions regarding this Notice, please direct inquiries to the PIH

Financial Management Division Energy Branch mailbox at: PIHEnergyBranch@hud.gov.

13. Paperwork Reduction Act

RRI Eligibility Submission and Supporting Documentation

The public reporting burden for this collection of information is estimated to average 2.0 hours, including the time for reviewing instructions, searching existing data sources, gathering, and maintaining the data needed, and completing and reviewing the collection of information. HUD may not conduct and sponsor, and a person is not required to respond to, a collection of information unless the collection displays a valid OMB Control Number.

This collection of information is required for Public Housing Agencies (PHAs) to receive an (RRI pursuant to 24 CFR § 990.185. RRI enables a PHA to retain 50% of any savings attributable to taking specific actions to reduce the cost of their energy consumption. The information will be used by HUD to determine whether applications meet eligibility requirements and application submission requirements. No assurances of confidentiality are provided for this information collection.

Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions to reduce this burden, to Reports Management Officer, Department of Housing and Urban Development, 451 7th Street SW, Room 4176, Washington, DC 20410-5000.

RRI Annual Savings Submission

The public reporting burden for this collection of information is estimated to average 10.0 hours, including the time for reviewing instructions, searching existing data sources, gathering, and maintaining the data needed, and completing and reviewing the collection of information. HUD may not conduct and sponsor, and a person is not required to respond to, a collection of information unless the collection displays a valid OMB Control Number.

Public Housing Agencies (PHAs) that receive Rate Reduction Incentive (RII) pursuant to 24 CFR § 990.185 are required to submit documentation on energy cost saving attributed to the reduction in the rate. The information will be used by HUD to determine the amount to the incentive included in its Operating Subsidy calculation each year. No assurances of confidentiality are provided for this information collection.

Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions to reduce this burden, to Reports Management Officer, Department of Housing and Urban Development, 451 7th Street SW, Room 4176, Washington, DC 20410-5000.

14. Appendix I: Sample PHA Submission

New RRI Eligibility Request and Savings Calculations

Provided below are examples of a new RRI eligibility request and savings calculation submission to illustrate the type of information and documentation required for HUD to review and determine RRI eligibility and annual savings. Depending on the type of allowable RRI action, information submitted by the PHA may differ from the below example and/or HUD may request additional information to complete its review. If a PHA has any questions on submitting information and documentation in accordance with this RRI Notice, please send all inquiries to PIHEnergyBranch@hud.gov.

Example PHA Submission

The Apple Housing Authority negotiated a lower electricity rate for one of their public housing properties because the property is located in a deregulated market. The result is that the housing authority is paying a fixed rate for electricity that is lower than the price they would have paid if they did not take any action to reduce the rate. The agreement for their negotiated rate took effect and the PHA began realizing savings on July 1, 2021. Apple Housing Authority is submitting a new RRI eligibility request to claim an incentive for Funding Year 2023. The full terms of the contract agreement are July 1, 2021 – December 31, 2023.

<u>Sample Submission for a New RRI Eligibility Request for Funding Year 2023– Submitted by August 30, 2022</u>

1. Apple Housing Authority (ZZ045)
2. AMP included in the RRI: ZZ045001
3. Action Description: The Apple Housing Authority negotiated a lower electricity rate with the utility provider, resulting in a fixed contract rate of $0.0845 per kWh. Included in this submission is the fully executed agreement with the utility provider that confirms the reduced rate and other pertinent terms.
4. The Apple Housing Authority will calculate savings based on the following allowable methodology using values from the applicable reporting period:
    a. Savings = (Default Utility Rate –Actual Utility Rate) * Total Consumption
5. The Apple Housing Authority will claim 50 percent of the actual savings
6. The Apple Housing Authority is seeking a multi-year RRI approval.

Departmental Review of Eligibility

HUD reviewed the Apple Housing Authority's eligibility request for a new RRI action. The request contained all the required information, appears to be an eligible RRI action per the RRI Notice, and was submitted to the Field Office and the PIHEnergyBranch@hud.gov email inbox before the August 30, 2022, deadline. HUD sent the PHA an initial determination of eligibility and reminded the PHA to submit their savings calculations by the September 30, 2022, deadline to receive final approval and to claim their incentive beginning in Funding Year 2023.

<u>Sample Submission Savings Calculation Methodology- Submitted by September 30, 2022</u>

Provided below are the net savings realized by the Apple Housing Authority for its negotiated electricity rate for each AMP during the reporting period for Funding Year 2023 (July 1, 2021 – June 30, 2022).

Month	Consumption (kWh)	Default Rate per kWh	Actual Utility Rate per kWh	Savings per kWh	Total Savings (Savings per kWh x Consumption)	RRI Eligibility (50%)
July 2021	49,045	$0.0917	$0.0854	$0.0063	$308.98	$154
August 2021	57,972	$0.0911	$0.0854	$0.0057	$330.44	$165
September 2021	57,224	$0.0912	$0.0854	$0.0058	$331.90	$166
October 2021	45,301	$0.0922	$0.0854	$0.0068	$308.05	$154
November 2021	44,443	$0.0914	$0.0854	$0.0060	$266.66	$133
December 2021	47,230	$0.0868	$0.0854	$0.0014	$66.12	$33
January 2022	56,763	$0.0856	$0.0854	$0.0002	$11.35	$6
February 2022	57,349	$0.0842	$0.0854	-$0.0012	-$68.82	-$34
March 2022	55,456	$0.0882	$0.0854	$0.0028	$155.28	$78
April 2022	48,012	$0.0895	$0.0854	$0.0041	$196.85	$98
May 2022	45,156	$0.0963	$0.0854	$0.0109	$492.20	$246
June 2022	41,953	$0.1011	$0.0854	$0.0157	$658.66	$329
TOTAL	**605,904**				**$3,057.67**	**$1,529**

The PHA provided these additional details and documentation to validate their savings calculated above:

- The default rate is the rate that Apple Housing Authority would have paid if it did not negotiate the reduced electricity rate. The default rates used in the savings calculations reflect the actual default rate during the reporting period and are published monthly on the utility's website located here: (http://www.utility.com/pricetocompare) under the "Price-to-Compare" section.
- The actual contract rate is stated in the previously submitted executed agreement with the utility provider. Additionally, the contract rate is listed in the sample invoices included as documentation in this submission.
- The provided sample invoices demonstrate the source of actual electricity consumption and actual costs used to determine the actual utility rate for the month of August 2021 and is consistent with the information included in the savings calculation table.

Departmental Final Approval

HUD reviewed the Apple Housing Authority's submission of savings calculations. The calculations are correct, clearly traceable, utilize an acceptable calculation methodology, and the additional documentation submitted (e.g., source of default rate and sample invoices for August 2021) sufficiently supports the calculations. HUD sent a final approval letter to the Apple Housing Authority to claim $1,529 on their HUD Form 52722 on the "Rate Reduction Incentive" line for Funding Year 2023 for the approved AMP. The letter also conveyed that the RRI approval is valid through December 30, 2023 (Funding Year 2025) provided that the PHA continues to be a party to the original contract under which this RRI eligibility approval is being granted, the action continues to produce measurable savings for the PHA, and the PHA submits savings calculations annually for approval in accordance with the current RRI Notice.

15. Appendix II: Calculating Utility Rate Savings

To calculate savings from an RRI action, a PHA needs to determine the difference between what it actually paid and what they would have paid if it had not taken any action during the 12-month period from July 1 to June 30 that is prior to the first day of the Funding Year. A PHA can calculate savings based on either the difference between the default rate and actual utility rate multiplied by actual consumption (Formula 1) or the difference between the total default and total actual utility costs (Formula 2). PHAs may submit savings for a partial reporting period (less than 12 months) if the RRI action did not start realizing savings until after the start of the reporting period. For most rate reduction actions, a PHA should use one of the following formulas to calculate savings rounded to the nearest whole dollar amount. Either:

Formula 1. Total Savings = ((Default Utility Rate) - (Actual Utility Rate)) x (Actual

Consumption)

Where Utility Rate = Cost /Consumption

OR

Formula 2. Total Savings = (Total Default Cost) - (Total Actual Cost)

Default Utility Rate = The utility rate that the PHA would have paid during the reporting period if it had not taken any action.
Actual Utility Rate = The actual utility rate that the PHA paid during the reporting period as a result of the action. This should match the rate reported on the HUD Form 52722 unless RRI savings calculations are based on a sub-component of the overall utility rate (e.g., energy/commodity rate only).

The actual utility rate and consumption are the current amounts for the reporting period in consideration. The Default rate is the rate that the PHA would have paid from the utility provider during the reporting period in consideration without the action taken. PHAs should determine which formula provides the most accurate accounting of savings resulting from the RRI action. For example, if a PHA negotiates a lower utility rate for the energy/commodity rate component of the utility bill only, Formula 1 is the preferred calculation methodology whereby the PHA can calculate the difference between default and actual utility rate for the energy commodity only as opposed to including other components of the utility bill not included in the RRI action (e.g., customer charge, meter charge, or demand charge). These methodologies are further illustrated in Example A2.1 and Example A2.2 below. An additional, allowable methodology is illustrated in Example A2.3 below, where the discount is not necessarily tied to consumption but is rewarded as a credit included on the PHA's utility bill. Finally, Example A2.4 below describes the allowable RRI-for-EPC methodology, which can be used only where HUD has explicitly approved the RRI in conjunction with an EPC.

A PHA requesting an RRI must use one of these methodologies to calculate annual savings by AMP. PHAs are encouraged to reach out to their utility company account representative for assistance in finding rate information. Unless there is a change in data availability or an update to Departmental RRI policy, the PHA must use the same methodology for all years that an action is eligible for an RRI. The PHA must maintain a record of how it calculated savings. Any change from the methodology used to calculate savings must be identified in the RRI savings calculation the PHA submits to the FO and Energy Branch each year. Records must be maintained in compliance with 24 CFR part 990. The PHA must keep a record of all information source(s) used to calculate savings. Records may be reviewed as part of HUD's review of the RRI savings calculation, during audits, or reviews of PHA operations. Records must be kept in accordance with 2 CFR §§ 200.333-338.

Each PHA must report its actual utility consumption and actual utility cost in the HUD Form 52722[10]. PHAs must report eligible RRI savings in the Rate Reduction Incentive line. The methodologies below demonstrate different ways to calculate RRI savings based on data availability. PHAs eligible for a standard RRI must report 50 percent or half of the savings, on the Rate Reduction Incentive line on HUD Form 52722 (Line No. 23). If a particular AMP or group of AMPs realized negative savings during the reporting period, so long as the total net savings for the RRI action are positive, the PHA is eligible to claim a Rate Reduction Incentive. The PHA must submit all eligible AMPs, even AMPs with negative total savings in their savings calculations submission and, if applicable, report the negative savings on the HUD Form 52722 for the relevant AMP(s).

[10] PHAs with an EPC in repayment must consult their approval letter to determine how to report consumption on the HUD Form 52722.

Example A2.1: Fixed Rate
The PHA is eligible for a lower utility rate and both the default utility rates and actual utility rates are clearly identified somewhere such as on the utility company's website, in a signed letter from the utility company, or in an executed agreement with the utility company.

- Default Utility Rate: $5.25/unit
- Actual Utility Rate: $3.75/unit
- Total Annual Consumption: 482,123 units
- Savings = ($5.25 - $3.75) x 482,123 = $723,259.50
- RRI Eligibility (50%): $723,259.50 * 50% = $361,630

Example A2.2: Variable Utility Rate

The PHA's local utility company publishes their default commodity rate on the PHA's monthly bill, but the PHA's properties are located in a deregulated location and have the option to purchase the commodity elsewhere. The PHA must record the default rate that is published on their bill each month and use this rate to calculate savings. PHAs using this methodology must account for all line items impacted by the action. For example, a commodity purchase may impact both the commodity and transportation costs on the bill as well as any additional monthly meter charges.

	Consumption (kWh)	Default		Actual		Savings
		Rate	Cost	Rate	Cost	
July	135,000	$ 0.1605	$ 21,668	$ 0.1509	$ 20,372	$ 1,296
August	139,000	$ 0.1673	$ 23,255	$ 0.1539	$ 21,392	$ 1,863
September	132,000	$ 0.1537	$ 20,288	$ 0.1409	$ 18,599	$ 1,690
October	125,000	$ 0.1571	$ 19,638	$ 0.1410	$ 17,625	$ 2,013
November	136,000	$ 0.0926	$ 12,594	$ 0.1109	$ 15,082	$ (2,489)
December	140,000	$ 0.2187	$ 30,618	$ 0.1609	$ 22,526	$ 8,092
January	139,000	$ 0.1352	$ 18,793	$ 0.1409	$ 19,585	$ (792)
February	142,000	$ 0.1366	$ 19,397	$ 0.1329	$ 18,872	$ 525
March	134,000	$ 0.1496	$ 20,046	$ 0.1359	$ 18,211	$ 1,836
April	125,000	$ 0.1421	$ 17,763	$ 0.1360	$ 17,000	$ 763
May	126,000	$ 0.1424	$ 17,942	$ 0.1340	$ 16,884	$ 1,058
June	131,000	$ 0.1651	$ 21,628	$ 0.1520	$ 19,912	$ 1,716
Total	**1,604,000**	**$ 0.1519**	**$ 243,629**	**$ 0.1409**	**$ 226,059**	**$ 17,570**[11]

In the example above, the PHA needed to calculate the costs and savings monthly to account for the monthly rate fluctuations.

[11] In the example above, the PHA correctly calculated savings each month to calculate the savings at the end of the year. If the PHA only used the total row to calculate the savings, the resulting value would be $17,644 due to rounding errors.

For each month, the PHA uses the formula:

- $Savings_{July} = ((Default\ Utility\ Rate_{July}) - (Actual\ Utility\ Rate_{July})) \times (Consumption_{July})$

- $Savings_{July} = ((\$0.1605) - (\$0.1509)) \times (135{,}000) = \$\ 1{,}296$

The overall savings is then calculated as:

- *Total Savings* = (*Total Default Cost*) - (*Total Actual Cost*)

- *Total Savings at 50% eligibility = ($ 243,629 - $ 226,059)*50% = $ 8,786*

<u>Example A2.3</u>: Monthly Discount or Credit/Rebate

The PHA participates in a renewable energy development program that results in a 10% discount that is applied through net metering credits to each utility bill. These credits are clearly itemized on each bill from the utility provider and factor in the payments made to the renewable energy developer. In this example, the discount may or may not be related to consumption; however, the PHA only needs to know the total net discount or credits by AMP, not the consumption, to determine the total savings for each AMP. The total net credits from the reporting period are the sum of net savings from each month, or $280.19. In this example, the PHA is eligible to retain 50% savings, for a final RRI eligibility of $140.

Month	Total Invoice Credits	Payment to Renewable Energy Developer	Total Net Savings	RRI Eligibility (50%)
July 2021	$222.98	$200.68	$22.30	$11
August 2021	$280.58	$252.52	$28.06	$14
September 2021	$260.45	$234.41	$26.05	$13
October 2021	$232.27	$209.04	$23.23	$12
November 2021	$240.68	$216.61	$24.07	$12
December 2021	$212.45	$191.21	$21.25	$11
January 2022	$214.78	$193.30	$21.48	$11
February 2022	$121.65	$109.49	$12.17	$6
March 2022	$237.90	$214.11	$23.79	$12
April 2022	$245.77	$221.19	$24.58	$12
May 2022	$256.43	$230.79	$25.64	$13
June 2022	$275.98	$248.38	$27.60	$14
TOTAL	**$2,801.92**	**$2,521.73**	**$280.19**	**$140**

<u>Example A2.4</u>: RRI-for-EPC Methodology

RRIs executed at the same time as an EPC are eligible to retain up to 100 percent of the savings (rather than 50 percent of the savings with the RRI alone) during the EPC repayment period when the

EPC and RRI impact the same AMP and utility. As a reminder, the allowable RRI-for-EPC methodology can be used only where HUD has explicitly approved the RRI incentive in conjunction with an EPC. The RRI-for-EPC methodology allows the PHA to calculate savings as follows:

- Savings = (Default Utility Rate – Actual Utility Rate) x Baseline Consumption (EPC Approval)

This differs from the traditional RRI methodology because instead of multiplying the savings per unit of measure by the actual consumption for the reporting period, the PHA multiples the savings per unit of measure by the baseline consumption value. This value is found in the PHA's EPC approval letter. Consistent with the traditional RRI calculation methodology, the default utility rate and actual utility rate are the rates from the applicable reporting period. An EPC approval letter may contain a baseline utility rate to estimate savings over time for the purposes of estimating an EPC incentive, but calculation of the RRI should continue to utilize current market rates to ensure that the RRI action continues to generate net savings for the PHA. The justification for this methodology is to continue to incentive the PHA to seek the best utility rates for their properties while not significantly impacting their cash flow during the EPC repayment period.

In the example below, the PHA has an active EPC and an approved RRI that impacts AMPs 1, 3, 4, 7, and 8. These AMPs are eligible to claim 100% of the RRI savings utilizing the EPC-for-RRI methodology. For example

- AMP 1 Savings = (Default Utility Rate – Actual Utility Rate) x Baseline Consumption x 100%
    - $429 = ($0.1065 - $0.0805) x 16,500 kWh x 100%

The other AMPs (2, 5, and 6) are eligible to claim only 50% of the savings and utilize the traditional RRI savings calculation methodology. For example:

- AMP 2 Savings = (Default Utility Rate – Actual Utility Rate) x Actual Consumption x 50%
    - $989 = ($0.0988 - $0.0805) x 108,035 kWh x 50%

As a reminder, in both examples, the default utility rate and actual utility rate are the rates from the most recent 12-month period from July 1 – June 30 that ended prior to the beginning of the applicable funding period.

AMP #	Actual Electricity Consumption (kWh)	Baseline Consumption from EPC (kWh)	Default Utility Rate per kWh	Actual Utility Rate per kWh	Savings per kWh	Total Savings (Traditional RRI)	RRI-for EPC Savings	RRI Eligibility Percentage	Total RRI Savings
1	13,969	16,500	$0.1065	$0.0805	$0.0260	$363.19	$429.00	100%	$429
2	108,035	N/A	$0.0988	$0.0805	$0.0183	$1,977.04	N/A	50%	$989
3	46,099	48,400	$0.1072	$0.0805	$0.0267	$1,230.84	$1,292.28	100%	$1,292
4	580,619	655,000	$0.0918	$0.0805	$0.0113	$6,560.99	$7,401.50	100%	$7,402
5	697,200	N/A	$0.1011	$0.0805	$0.0206	$14,362.32	N/A	50%	$7,181
6	645,482	N/A	$0.1065	$0.0805	$0.0260	$16,782.53	N/A	50%	$8,391
7	93,351	100,500	$0.1065	$0.0805	$0.0260	$2,427.13	$2,613.00	100%	$2,613
8	51,236	55,100	$0.1065	$0.0805	$0.0260	$1,332.14	$1,432.60	100%	$1,433
TOTAL									**$29,729.33**

16. Appendix III: On-Site Renewable Energy RRI

In the example below, the PHA installed a solar photovoltaic (PV) system that generated 25 percent of the electricity consumed by the PHA, 20 percent (157,930) of the electricity was consumed on-site and 5 percent (39,483 kWh) was sold back to the grid (this happens if the PHA generates the electricity at a point in the day when they do not need it). Without the solar project, the PHA paid \$0.1701/kWh but after the project the PHA paid \$0.1901/kWh. The blended electric rate went up slightly because of the standby charge. Despite the higher utility rate, the PHA paid \$21,716 less on the electricity bill because of the electricity generated on-site. However, if the blended utility rate accounted for all electricity generated on-site when calculating the blended rate, then the effective blended utility rate would be \$0.1426/kWh. In this scenario, the PHA may account for the solar electricity generated and consumed on-site when calculating the blended rate for savings determination. The PHA may be eligible to retain 50 percent of the savings (\$13,542.50 in this example) as an operating subsidy benefit, subject to Departmental approval.

	Before	**After**	**Savings**	**Notes**
Total On-site Consumption	789,650	789,650		
Renewable Energy Consumption		157,930		This is the amount of electricity that was generated and consumed on-site.
Net Metering Credit		39,483		This is the excess electricity generated on-site that is sold back to the grid.
Adjusted Consumption (kWh)	789,650	592,237	197,413	Amount of electricity that the PHA was billed for = (Total On-site Consumption) - (Renewable Energy Consumption) - (Net Metering Credit)
Utility Rate ($/kWh)				**Unit cost of electricity**
Delivery	$0.0800	$0.0800		Amount charged by the local electric company (default provider)
Supply	$0.0900	$0.0900		Amount charged for the electricity to be put into the transmission lines
Standby Charges*		$0.0600		See definition below
Utility Bill				
Meter Charge	$50.00	$50.00		Flat monthly fee
Delivery	$63,172	$47,379		= (Delivery) x (Adjusted Consumption)
Supply	$71,069	$53,301		= (Supply) x (Adjusted Consumption)

Standby Charges		$11,845		= (Standby Charges) x (Renewable Energy Consumption + Net Metering Credit)
Total Cost	$134,291	$112,575	$21,716	Utility Bill (sum of charges above)
Blended Rate	$0.1701	$0.1901	- $ 0.0200	= (Total Cost) / (Adjusted Consumption)
RRI Calculation				
Blended Rate for Savings Determination	$0.1701	$0.1426	$0.0275	= (Total Cost) / (Total On-site Consumption)
RRI Eligibility Savings	$10,858.72 = 50 % x (Total On - site Consumption) x (Blended Rate Savings) $10,858.72= 50 % x 789,650 x $0.0343			

*Standby Charges - Convenience fee charged by electric company for the electricity generated on-site. This covers the local power company's need to standby and provide backup power if the renewable energy system goes offline. Not all utility companies charge this fee. Utility companies that charge this fee will use different methods for calculating it.

In the scenario above, the PHA will enter the following information on the HUD Form 52722:

- Billed electricity consumption = 592,237 kWh
- Billed electricity cost = $112,575
- Billed electricity blended rate = $0.1901/kWh
- Rate Reduction Incentive = $10,858

________/s/_______________
Dominique Blom
General Deputy Assistant Secretary
for Public and Indian Housing