CHAPTER 9

ALLOWANCES FOR UTILITIES AND OTHER SERVICES

Overview

In calculating the gross rent for units leased under the housing choice voucher program, as well as the HAP payment for which the family qualifies, the PHA must consider not only the contract rent that is paid to the owner, but also the anticipated cost of any utilities that the tenant family is required to pay. The request for tenancy approval submitted by the owner and the prospective tenant tells the PHA the utilities the tenant will pay for directly, and the utilities that are included in the rent. These provisions are incorporated into the lease and the HAP contract. Any time a change is made in the responsibility for payment of utility expenses, the owner and the tenant must report the change to the PHA so that the contract rent and the utility allowance can be adjusted accordingly.

A PHA is responsible for establishing and maintaining a utility allowance schedule that provides reasonable allowances for tenant-paid utilities. The utility allowance is intended to enable participating families to pay typical costs for utilities and services paid by energy-conserving households occupying units of similar size and type in the same locality. If the family is extravagant in its use of utilities, the additional costs incurred are not the responsibility of the PHA. A family complaining that its utility allowance is inadequate should be counseled about reasonable conservation measures, such as turning down the thermostat at night or setting the air conditioner at a higher temperature during the day when family members are out of the unit. Many utility companies also provide useful materials on energy conservation and/or energy audit services that can help participants identify conditions or practices that result in high utility bills.

Payment of bills for tenant-paid utilities is the responsibility of the family, and any interruption or termination of utility services because of the family's failure to pay is

considered a breach of the family's obligations under the housing choice voucher program. The PHA administrative plan should include the PHA's policies regarding the termination of assistance to families who cause their unit to be in violation of HQS because of failure to pay for necessary utilities or services.

Ways in Which Utilities are Measured

Master-Metered Utilities

A master meter measures consumption for the building as a whole, rather than for individual dwelling units or households. Master meters are owned by the local utility company. Where utilities are master-metered in a project-based program, the PHA pays the local utility company for utilities used. In such instances, the utility costs are included in the basic rent levels established for the development, and no separate allowance is provided. However, the PHA may establish a "surcharge," an extra fee paid by residents for utility consumption for major appliances not seen as essential, such as a food freezer. This type of metering will be seen more in public housing rather than the Section 8 Program.

Check-metered Utilities

Some PHAs install separate sub-meters (called "check-meters"), in addition to the utility-owned master meter, to measure consumption by individual dwelling units. These check-meters are owned by the PHA or project-based supplier. As with master-metered utilities, the PHA pays utility company for utilities used. With check-metered utilities, however, the PHA provides each household a utility allowance in the form of a maximum level of consumption that it may consume without a surcharge. A surcharge is applied when a household exceeds this level. This will also be used more in the public housing program rather than the Section 8 Program.

Individually Metered Utilities

Where utilities are individually metered, each household has a separate account with the utility company and pays the bill directly to that company. For this reason, individually

metered utilities also are called "resident-paid" or "resident-purchased" utilities. The PHA provides a utility allowance to the household through a reduction in the household's monthly rent. Many buildings have different metering systems for different utilities (sometimes referred to as "mixed metering"). For example, electricity might be individually metered, gas master-metered, and water check-metered. An allowance also could be provided to residents for some non-metered utilities, such as trash pickup and sewer services, because the residents pay for these services directly. This type of metering and system is the most common in HCV tenant-based housing program.

Individual meters generally are more common than check-meters in public housing. However, metering configurations vary widely by region. For example, individual metering is more prevalent in the Northwest, whereas check-metering is very common in the South.

Allowances Are Calculated for Categories of Units

Utility consumption tends to vary according to certain characteristics of units, such as building construction type and size. To account for such factors, PHAs group dwelling units with similar characteristics into categories and calculate distinct allowances for each category. Each category (group) of dwelling units is called an allowance category. Categories can include single family, multi-family, manufactured housing, SRO's, etc.

Program Requirements for the Utility Allowance Schedule

A PHA is required to maintain a utility allowance schedule for tenant-paid utilities, tenant-supplied refrigerators and ranges, and other tenant-paid housing services (such as trash collection). The utility allowance schedule must include the utilities and services necessary to provide housing that complies with HQS. In areas where the majority of housing units provide central air conditioning or wiring for tenant-installed air conditioners, the utility allowance schedule should provide an allowance for tenant-paid air conditioning costs. The utility allowance schedule should not include allowances for personal expenses, such as telephone, and non- essential utility costs such as the cost of cable or satellite TV.

The PHA must classify utilities and other housing services according to the following general categories:

- Space heating
- Air conditioning
- Cooking
- Water heating
- Water
- Sewer
- Trash collection
- Other electric
- (Tenant-provided) refrigerator
- (Tenant-provided) range
- Other specified housing services

Types of services that would **NOT** be included for a utility allowance:

- Internet
- Telephone services
- Cable Television

The cost of each utility and housing service category must be stated separately. For each category, the schedule must take into consideration the type and size of the unit, and the type of utility used.

- *Unit types* generally requiring separate utility allowances typically include garden and high-rise apartments, row houses or town houses, end-of-row or semi-detached units, detached units, and manufactured homes.

- *Unit sizes* are classified by number of bedrooms. When calculating the utility

allowance for a family, the PHA must use the allowance for the unit size actually leased by the family, rather than the family unit size determined under the PHA's subsidy standards.

- *Type of Utility* generally refers to the type of fuel used. The utility allowance schedule should include allowances for each type of utility or fuel commonly used in the community. If the utility or fuel is available from more than one supplier, the PHA can determine an average cost across all suppliers, or can use different allowances for utilities or fuels purchased from different suppliers.

The PHA's utility allowance schedule must be entered on form HUD-52667, Allowances for Tenant Furnished Utilities and Other Services. Separate forms should be completed for each housing type. Allowances for other electric, water heating, and water/sewer costs will typically be the same across all unit types for each unit size, while the allowance for cooking may vary slightly based on the type of utility. Allowances for heating and air conditioning will vary based primarily on the number of exterior walls exposed and the type of utility. An example of a correctly completed form HUD-52667 for detached units is included in the forms section of the materials.

The PHA should maintain copies of all supporting documentation used in determining both the initial allowances and any revisions. Such documentation might include the consumption estimates that are the basis of the dollar allowances, letters or rate schedules from local utility companies, as well as worksheets used to develop the schedule.

A copy of the initial utility allowance schedule, and any later revisions, must be sent to the HUD field office. If directed by HUD, the PHA must revise the utility allowance schedule to correct any errors to update the schedule to reflect changes in utility costs or as necessary.

Establishing a Utility Allowance Schedule

When establishing a utility allowance schedule, a PHA should make every effort to base

the allowances on actual rates and average consumption estimates that will be adequate to cover expected average utility costs over a twelve-month period. (Like the "budget plans" available through many local utility companies, the allowances are based on an estimated full year of usage divided equally over 12 months, although the family's actual usage may fluctuate from month to month.) Information regarding typical utility usage and the cost of utilities and services is generally available through the following local sources:

- Electric utility suppliers
- Natural gas utility suppliers
- Water and sewer suppliers
- Fuel oil and bottled gas suppliers
- Public utility commissions
- Real estate and property management firms
- State and local agencies
- Appliance sales and leasing firms
- Neighboring PHAs

Average Consumption Data

If a PHA is unable to find adequate sources for local information regarding utility consumption, HUD will approve use of national average consumption data. These national average consumption figures represent average amounts for an "average" 2 ½ bedroom unit in a locality that has approximately 4,000 heating degree days and an average local water temperature of 50 degrees. The consumption figures must be adjusted for the size of the dwelling unit. The allowances for units in the PHA's locality may need to be adjusted to reflect the higher or lower cost of utilities resulting from variations in typical outdoor temperatures and/or the temperature of the local water supply. Data on the average number of heating or cooling degree days for the locality (the sum of the number of days that the indoor temperature must be raised or lowered from the outdoor temperature level to maintain a comfortable temperature on each day for which heating or cooling is required) is generally available from the National Weather Service or other local sources. Data on the average local "degree days" will provide a basis for making local

adjustments to these average consumption figures.

Allowances by Unit Size

Whenever possible, consumption data should be obtained for each unit size and type. If consumption data is available only for an average unit size (2 ½ bedrooms), the utility costs should be multiplied by the following factors to determine the costs for a specific unit size:

Number of Bedrooms	Number to Multiply 2 ½ Bedroom Average
1	0.4
2	0.8
3	1.2
4	1.6
5	2.0

Calculating a Utility Allowance

In the absence of reliable third-party average utility expense data, monthly utility allowances can be calculated by multiplying estimated monthly consumption times the local utility rate.

Estimating Utility Expense from Average Consumption Data

The average consumption of electricity used for domestic hot water is 340 KWH.
At a scheduled rate of $.0552362 per KWH, the *average* monthly allowance for domestic hot water for a 2½ bedroom unit would be:

340 KWH x $.0552362 (rate per KWH) = $19 (rounded to nearest dollar)

The allowance for a 0-bedroom unit will be: $19 (average 2½ BR cost) x 0.5 (0-bedroom adjustment factor) = $10 (rounded to nearest dollar)

The allowance for a 5-bedroom unit will be: $19 (average 2½ BR cost) x 1.6 (5-bedroom adjustment factor) = $30 (rounded to nearest dollar)

This section describes these two methodologies and discusses the advantages and disadvantages of each. The most appropriate methodology to choose depends on a PHA's particular characteristics and resources. The information here is intended only to familiarize you with these methodologies.

The 2 basic ways to calculate allowances are:

- Engineering-Based Methodology
- Consumption-Based Methodology

Engineering-Based Methodology

With the engineering-based methodology, the PHA uses engineering calculations and technical data to estimate reasonable energy and water consumption for a particular type of dwelling unit or household. The reasonableness of allowances set using the engineering-based methodology depends on assumptions made in the calculations. This

section provides help in developing the allowance categories and gives recommendations on these important assumptions.

The first step in establishing allowances with the engineering-based methodology is to develop allowance categories that group dwelling units according to factors that affect consumption requirements. Then, the consumption requirements for the various end-uses to be covered by the allowance—space heating, hot water, cooking, lighting, refrigeration, appliances, and/or water—are each determined separately. In some cases, not all of these end-uses are included in an allowance. For example, when a utility is master-metered, it is not included. Depending on the end-use, the consumption requirement may be estimated based on engineering formulas, standardized consumption tables, or in-house information on equipment used or the physical condition of the developments. Below is a brief description of how the consumption requirements for various end-uses are commonly estimated under the engineering methodology.

Advantages and Disadvantages of the Engineering Method

Advantages of the Engineering-Based Methodology

- The energy requirements of an "energy-conservative household" can be estimated using this methodology. By focusing on what consumption levels should be, this method promotes energy-conservative behavior.
- Allowances do not need to be recalculated every year. Allowances should be recalculated periodically, however, to account for gradual changes in equipment and appliance use and efficiency. They should also be recalculated whenever major changes are made to the developments.
- The PHA does not need to obtain actual consumption data for its residents to use this methodology.

Disadvantages of the Engineering-Based Methodology

- PHAs must have certain technical information available, such as heat loss calculations, efficiency of appliances and equipment, and weather data.
- PHAs must make assumptions about what is reasonable consumption.
- The allowances are not linked to actual consumption and may be far off from actual consumption patterns.

Space Heating

The energy requirement for space heating is estimated using an engineering calculation. One calculation is done for each **allowance category**. The following inputs are needed:

- the **heat loss** of a dwelling unit;
- the 30-year average **heating degree days** for the region;
- the **efficiency** of the heating system;
- the **Btus** per fuel unit;
- the **indoor temperature**; and
- the **outdoor design temperature** in winter.

The heat loss calculation for each unit category will be either already on file or can be performed by the local utility, a consultant, or an in-house engineer. The efficiency of the heating system can be estimated based on the age and type of system. Although there is no standard specified by the regulations, PHAs frequently establish an indoor temperature of 72 degrees F for family units and 75 degrees F for elderly units.

Hot Water

The energy requirement for hot water is estimated using an engineering calculation. One calculation is done for each allowance category. The following inputs are needed:

- the **temperature of the cold water**;
- the **temperature of the hot water**;
- the **number of gallons per month** reasonably consumed by a household;
- the **efficiency** of the hot water heating system; and
- the **Btus** per fuel unit.

The temperature of the cold water can be estimated based on the geographical region. Maintenance staff can measure the temperature of the hot water at the tap. If the temperature at the tap is lower than the temperature in the hot water heater because of storage or distribution losses, this difference will be accounted for in an accurate estimate

of the system efficiency. The number of gallons per month can be based on standard consumption levels. The efficiency of the hot water heating system depends on the age and type of system. If the hot water heating system involves an extensive distribution system or a storage tank, estimating the system efficiency is a more complicated task because of storage and distribution heat losses and should be performed by a licensed professional engineer.

Cooking

The energy requirement for cooking is estimated using standard consumption levels.

Lighting

The energy requirement for lighting is estimated by multiplying the wattage of each light bulb by the number of hours the average household would have the lights on.

Refrigeration

The energy requirement for refrigeration is determined using in-house information on the annual energy consumption of the refrigerators provided in the dwelling units. Refrigerators manufactured during the last decade have labels that provide this information.

Miscellaneous Appliances

The energy requirement of miscellaneous appliances can be estimated using standard consumption tables available from the local utility.

Laundry

Some PHAs provide an allowance to cover the reasonable utility requirements of laundry. For example, the energy requirements of clothes washers are estimated based on the wattage of the washer and how often it is used.

Air Conditioning

Some PHAs provide an allowance to cover the reasonable utility requirements of air conditioning. The energy requirement for air conditioning is determined based on the wattage of the air conditioner and how often it is used. HUD encourages PHAs to review the allowance to determine if it is a want or a necessity and as a measure to reduce program costs.

Water

A household's water consumption requirement depends on whether water-saving devices have been installed and is determined using standard consumption levels.

Because the utility allowances derived from the engineering methodology are not linked to past patterns of resident consumption, a PHA that switched to this method from the consumption-based methodology might experience a significant increase or decrease in the percentage of resident households whose actual consumption exceeds their allowance.

If a PHA finds that a large percentage of its residents have consumption levels that exceed the allowance developed under the engineering-based methodology, the PHA will want to re-examine its assumptions about consumption levels to make sure that they are not too strict and that any excess consumption is within the residents' control to avoid. As one approach to evaluating the reasonableness of the allowances, PHAs can compare the allowances derived under the engineering method with those calculated under the consumption-based method. (This is fairly straightforward if the PHA was previously using the consumption-based method).

If the re-examination suggests that the engineering-based allowances that were initially calculated are too low, the PHA can go back and make adjustments in the assumptions used for calculating the individual utility/end-use consumption levels (such as in the number of loads of laundry per week, etc.) to provide more reasonable allowances for residents.

Consumption-Based Methodology

With the consumption-based methodology, the PHA uses actual utility data on past consumption by its residents to establish utility allowances. These data are in the form of billing records (where utilities are individually metered) or check-meter records (where utilities are check-metered). The first step in establishing allowances with the consumption-based methodology is to specify the allowable and non-allowable end-uses. The PHA then needs to decide on the timeframe that its historic consumption data will span.

The PHA can take 2 different approaches in defining the timeframe of its consumption data:

- **Three-Year Rolling Base.** Many PHAs use a three-year rolling base of data to calculate allowances. Every year, new consumption records are added to the database, and consumption records from the oldest year are removed. With this approach, the PHA must recalculate allowances every year.

- **Fixed Data-base, Normalized for Weather.** An alternative approach, which may be used when an allowance is provided for space heating, is to use a fixed database of consumption information from one or more years, adjusted for the effects of weather using local weather information. When this approach is taken, the PHA does not need to obtain consumption data every year.

Next, the PHA needs to develop allowance categories that group dwelling units according to factors that affect consumption requirements. Allowances are then established through the following process:

- Collecting the consumption data
- Grouping the data into allowance categories
- Cleaning the data and checking the statistical validity of the data sets
- Determining the "typical" consumption for each allowance category

- Adjusting the data for any non-allowable end-uses (if such consumption has not already been removed from the data)
- Converting consumption allowances to dollar allowances.

Advantages and Disadvantages of Consumption Based Methodology

Advantages of the Consumption-Based Methodology

- This methodology is familiar to most PHAs.
- For smaller PHAs with a homogeneous housing stock and readily-available consumption data, this methodology may be simpler than the engineering-based methodology.
- The allowances have a direct link to actual consumption.

Disadvantages of the Consumption-Based Methodology

- This methodology does not provide insight into what proportion of usage may be attributed to wasteful consumption, so there is no guarantee that the average consumption for a given allowance category is representative of an "energy-conservative household."
- When the three-year rolling base approach is used, consumption data must be obtained every year and allowances must be recalculated annually.
- Where utilities are individually metered (resident-paid), obtaining the consumption data from the local utility can be a burdensome process.

Collecting the Consumption Data

The first step in establishing allowances with the consumption-based methodology is to collect the consumption data. In the case of individually metered utilities, PHAs obtain consumption records from the local utility. Generally, PHAs must present a release form signed by the resident for each billing record. Where utilities are check-metered, the consumption data are records of check-meter readings that the PHA makes on a routine basis. PHAs that provide allowances for more than one utility (for example, electricity, gas, and water) must collect consumption data for each of those utilities.

Grouping the Data into Allowance Categories

Consumption data are then grouped according to the allowance categories developed by the PHA. Each allowance category should have one data set.

Cleaning the Data and Checking for Statistical Validity

These are two distinct but related activities, which are both concerned with ensuring that the data set (i.e., the sample of consumption records) can provide a good approximation of the typical utility consumption experience of all units within the allowance category being studied. This is a critical step in the use of the consumption-based method. To improve the quality of the consumption data being used for its calculations, a PHA will generally want to "clean" the data by deleting dwelling unit utility records that are atypical or inaccurate because of vacancies, estimated readings that are not corrected for by subsequent actual meter readings, and/or non-allowable end-uses.

If the variation in the levels of consumption among units in an allowance category is high, however, a large sample size (i.e., data on a lot of the units in the allowance category) may be necessary in order to achieve statistical validity. If this is the case, then the PHA may not have enough extra data available to be able to drop the units with vacancies or non-allowable end-uses, etc., entirely from its sample; instead, the PHA may need to make adjustments in these data to allow their inclusion as part of the allowance calculations.

Determining the Typical Consumption for Each Allowance Category

Once statistical validity is confirmed, the PHA determines the "typical" usage for each allowance category. The typical usage is determined by finding the **point of central tendency**. Both the mean and the median are points of central tendency.

The reasonableness of the calculation of typical consumption using the consumption-based methodology depends on the selection of proper allowance categories, the quality of the consumption data, and on whether the data set was statistically valid.

Even after an PHA has derived an accurate estimate of a typical (whether mean or median) consumption level, however, the PHA must still decide whether the standard for the "energy-conservative household" should be set at that level. For example, if the mean (average) is used as the standard, then in all probability a sizable percentage of resident households will have consumption above this level; the PHA needs to ask itself whether the "excess consumption" of these other households was actually wasteful and within the residents' ability to control. If the answer to either part of this question is "no," then the PHA should consider establishing the allowances at some level above the mean (average) consumption figure.

Utility Rate Schedules

The cost of gas and electricity generally varies according to the amounts consumed, as shown on the utility suppliers' rate schedules. For this reason, it may not be possible to accurately calculate the cost for a utility in any one-service category until the usage of that utility for all service categories is known. For example, a unit with electric heating, may qualify for a lower "All-Electric" rate if electricity is also used for cooking, lighting, refrigeration, and domestic hot water. Rates for gas usage may decline with the volume of gas used, resulting in a lower cost for gas used for heating, cooking, and domestic hot water than for each use considered separately. For convenience in calculating the utility allowances for any combination of utilities, it is recommended that the PHA use the higher rates. Allowances for electric cooking, water heating, and space heating should be calculated using the lower rates at the middle or bottom of the company's rate schedule.

Ranges and Refrigerators

If rental units in the PHA's jurisdiction are typically leased without owner-provided ranges and/or refrigerators, an allowance must be made for the cost to the family of providing its own. Allowances for tenant-provided ranges and refrigerators should be based on the lower of the cost of leasing the equipment or the cost of purchasing it on an installment plan.

Other Utilities and Services

The utility allowance schedule should also provide allowances for all other utilities and services for which, in the PHA's locality, the tenant is typically responsible, and which are required for compliance with HQS. Examples would be firewood used as a primary heating fuel, or the required annual flushing of a septic tank in an area without public sewers.

Using the Utility Allowance Schedule

The PHA should provide a utility allowance schedule to families receiving a housing choice voucher. The schedule will allow the family to calculate the estimated cost for tenant-paid utilities, and to compare gross rents for various units with local payment standards and personal affordability limits.

When a family has located a unit and submitted a request for tenancy approval (form HUD-52517) the PHA can calculate the actual utility allowance for the family.

Section 11 of the request for tenancy approval as illustrated on the following page will indicate the utilities the tenant must pay and the utilities the owner will cover.

Using the information from the request for tenancy approval and the utility allowance schedule the PHA can compute the utility allowance for a two bedroom unit for the family submitting a request for tenancy approval using the information below.

Because the allowances for utilities and services are subject to change over time, the utility allowance should be recalculated every year at the family's annual reexamination. The PHA should ensure that the most recent update of the utility allowance schedule has been used to calculate the family's utility allowance, and that there has been no change in the utilities and allowances supplied by the tenant.

Using a Higher Utility Allowance as a Reasonable Accommodation

Housing choice voucher program regulations require a PHA to approve a utility allowance

amount higher than the applicable amount on its utility allowance schedule if a higher allowance is needed as a reasonable accommodation to make the program accessible to and usable by a family member with a disability. The family must request the higher allowance, and should provide the PHA with sufficient information to determine the amount of additional allowance required. For example, if it determined that a family member had a disability that required such accommodation, the PHA would be required to approve a family's request for an allowance for air conditioning in a locality where the majority of rental units do not have air conditioning.

Reviewing and Revising Utility Allowances

A PHA must review its utility allowance schedule annually, and must revise its allowances at other times when there has been a change of 10 percent or more in the utility rates or fuel costs since the last revision of the schedule. To conduct a utility allowance review, the PHA must obtain new rate schedules or quotes from utility and fuel suppliers. These new rates should be compared with the rates previously used to calculate the last revision to the utility allowance schedule to determine whether an adjustment is needed.

When a utility allowance adjustment is required, it should be calculated in the same way as the original allowance. It should not be necessary to revise the consumption figures used, as there is generally very little variation in these figures over time. The new rates should be applied to the consumption figures for the locality to calculate the revised new utility allowances.

The revised allowances will be used to calculate a family's gross rent at its next annual reexamination.

SEMAP Indicators

As part of the SEMAP assessment process, PHAs are required to certify that they maintain up-to- date utility allowance schedules, and that they use them to calculate correct utility

allowances for participating families.

SEMAP Indicator 4, *Utility Allowance Schedule*, requires the PHA's certification that an annual utility allowance review has been conducted and that the utility allowance schedule has been adjusted where there was a change of 10 percent or more in the rate for a utility since the last revision. This requires that the PHA conduct an annual review and adjust the allowances as appropriate. The PHA should retain all information used in the annual review, whether or not revisions are made, and should document any revisions made.

Among other factors, SEMAP Indicator 3, *Determination of Adjusted Income*, measures the extent to which the PHA uses the appropriate utility allowances to determine gross rent for the unit leased. This requires that the PHA, in its supervisory quality control reviews, verify that the correct utility allowances were used in calculating the utility allowances for the families reviewed.