

HUD UTILITY MODEL INSTRUCTIONS

I. Introduction

The HUD Utility Schedule Model has been developed to provide a consistent basis for determining utility schedules, using form HUD-52667, throughout the U.S. This spreadsheet model is organized into several tabs and was designed to work with Microsoft Excel 2000 and 2003 although it may also work with other spreadsheets including older versions of Excel.

Each first time user must complete the entries on the “Location” tab and the “Tariffs” tab of the spreadsheet model. Entries are shown as cells with a white background and are surrounded by cells with a grey background. The resulting forms are on tabs with “52667” as part of their name. When you print from the “52667” tabs, the entire page is not printed, only the utility schedule. Four different “52667” forms are included but you can add more or remove any that you don’t want. No changes to the “52667” tabs are needed except for selecting the Unit Type, the type of Electric Tariff, kind of Electric Heating, and Age of Dwelling. Values cannot be entered directly on the form. They are based on the calculations shown to the right and below the form.

The summary tab shows the total allowances for a large number of common cases. It can be used to see the overall impact of a rate change.

Almost all the calculations are performed on the “52667” tabs. The main form is in the upper left hand corner of the worksheet tab but below it and to the right are the calculations. They are shown in a step-by-step fashion to make it clear how the calculations were performed. These calculations cannot be changed, they take the values you have entered on the “Location” and “Tariffs” tabs and simply perform the calculations.

II. Detailed Instructions

The following sections are related to the sections on each of the tabs of the HUD Utility Schedule Model. Remember, the input is on the “Location” tab, “Tariffs” tab, and just four places at the top of the “52667” tabs. No other inputs or changes are permitted.

A. Help on the Location Tab

The first time you use the spreadsheet you will need to enter some values on the “Location” tab, but after that most of the values will not need to change except for the “Form Date.” The “Form Date” is the date that you want shown on the “52667” forms.

1. General Information on the Location Tab – The first section of the “Location” tab is for “General Information” and contains items that apply to all HUD-52667 forms in the spreadsheet.

Name of Housing Authority - enter the name that you want to appear on the HUD-52667 forms. This can either signify a Housing Authority, a housing project name, or an area name. This entry will be automatically put on each copy of the form under the work “Locality”. Unless the name changes, it is unlikely that you will need to alter this value.

Form Date – enter the date that you want to appear on the completed forms. This date is often the date the form goes into effect, or the date the form was last changed. This entry is likely to change every time the spreadsheet is updated.

Include Allowance for Air Conditioning – check the box if your housing authority normally includes an allowance for the electricity consumption associated with providing air conditioning. Depending on the location and the climate, this is normally checked.

2. Climate Data on the Location Tab – The “Climate Data on the Location tab can be quickly gathered from the companion spreadsheet tool called ZipCodeToDegreeDays. Select the location closest to your housing authority using zipcode information. At times multiple weather monitoring sites will be available; select the site that is closest to the population served by the housing authority or the most well known monitoring location. Data from the ZipCodeToDegreeDays spreadsheet can be copied and pasted directly on to the “Location” tab using the [Edit][Paste Special][Values] menu item in Excel.

If you prefer to enter data directly into the Climate Data area of the “location” tab, you can do that also. You only need to enter data into the fields show as “required” since they are the only ones in the Climate Data Section that are used by the rest of the spreadsheet. If you do enter the monthly degree day data and annual degree day data, the calculated fields at the bottom of the entry area “check of HDD” and “check of CDD” will indicate if the monthly values add up to the annual value by showing a zero difference.

B. Help on Tariffs Tab

A majority of the effort in using this model is to update the rates paid for utilities. This is the purpose of the “Tariffs” tab. The “Tariffs” tab allows you to update the tariffs for electricity, natural gas fuel oil, liquefied petroleum gas (LPG), water, sewer, trash and certain appliance fees. The tab has columns for the Current and Previous values for almost all of the entries. Only the entries under the Current column are used in the rest of the spreadsheet and get used in calculating the values that appear on the forms. The entries in the Previous column are ignored and are there only for reference and to determine how much the tariff has changed. All energy and non-energy related costs area entered on this tab. Most utilities allow you to download a tariff or rate book from their

web site. After you do this, get a bill to use as an example and determine all of the components that make up the bill. At times the tariff is broken into a main tariff and many riders. Some utilities describe taxes in the rate book and some do not, so check the example bill.

In some locations, utilities have become deregulated and multiple companies may be involved in providing this service. This is especially likely for natural gas and electric utilities. While the spreadsheet does not have any specific entries for deregulated utilities, it is easy to use the spreadsheet with them. To enter deregulated utilities, simply add up the charges for each kWh or other unit of measure and enter the combined total. For example, if an electric generating company charges 4 cents per kWh and the electric distribution company charges 3 cents per kWh, simply add the two charges together for 7 cents per kWh. If the companies have multiple block rates, these charges need to be combined for each rate block.

1. Standard Electric Utility Tariff –

Utility Name and Rate Name – enter the name or an abbreviation of the name for the utility that provides electricity and for the specific rate to be used in the calculations. Many utilities have multiple rates that could be used by residential customers and you should choose one that is the most typical.

Rate Effective Date – often utilities will use the same name for a tariff even though they may change the values. Entering an effective date here will allow you to understand what version of the tariff you are using.

First Month of Summer and Last Month of Summer – select from the pull down lists the months that are the first and last months of the summer period as defined in the electric tariff. If the tariff does not vary by season, use only the “summer” blocks and set the summer period from January through December. If the tariff is seasonal but starts mid-month, make sure the number of months in the tariff that are summer and the number of months here are equivalent since the number of months is more important than exactly when in each month the tariff changes. If your spreadsheet program is not Excel, you may not see the drop down list of choices. If that is the case, just enter the month number in the rows below each input.

Monthly Charges – enter the value charged for electric service. This is sometimes called a monthly charge or a service charge.

Size of XXX Block – This entry is repeated for the first, second, third and fourth blocks of the tariff in the summer and in the winter. If the tariff does not have block rates that vary by season, then only enter values for the summer entries. The size of a block is important for tariffs that have “stepped” blocks. A stepped tariff charges a certain amount for each kWh in the first group of kWh, and different charges for greater use. They are often expressed as 5 cents per kWh for the first 500 kWh and 4 cents per kWh

for the remaining kWh. For this case you would enter “500” in the “Size of First Block” and “remaining” in the “Size of the Second Block”. You could also enter a large number instead of the word “remaining” in the “Size of the Second Block” field, which will indicate that the rest of the kWh should be charged at that price. Since some utilities have multiple blocks in their tariffs, up to four blocks are provided. If more blocks are part of the tariff, average the cost of some of the blocks together and combine their sizes. If the rate is not a stepped rate, enter values for the first block only.

Cost of XXX Block – This entry is repeated for the first, second, third, and fourth blocks of the tariff in the summer and in the winter. If the tariff does not have blocks that vary by season, only enter values for the summer entries. The cost of a block is important for tariffs that have “stepped” blocks. A stepped tariff charges a certain amount for each kWh in the first group of kWh, and different charges for greater use. They are often expressed as 5 cents per kWh for the first 500 kWh and 4 cents per kWh for the remaining kWh. For this case you would enter 0.05 in the “Cost of First Block” a 0.04 in the “Cost of the Second Block”. Since some utilities have multiple blocks in their tariffs, up to four blocks are provided. If more blocks are part of the tariff, average the cost of some of the blocks together and combine their sizes. If the rate is not a stepped rate, enter values for the first block only. If multiple companies are involved in providing the utility service, such as when the utilities are deregulated, then add up the costs for each company for that block.

Extra Charges – An extra fee that is charged by the utility for every kWh that is sold. This is often expressed as a fuel cost adjustment, an energy cost adjustment, or a surcharge. Credits are often expressed as a fuel cost adjustment, an energy cost adjustment or a surcharge. Credits are often provided on the basis of every kWh and can be entered as negative numbers. If multiple extra charges exist in the tariff, then add them up.

Taxes – This is expressed as a whole number percent. Don’t format the cell in Excel as a “percent” format. For a 3% tax simply enter 3. The tax is calculated after calculating a subtotal that includes the block charges, the monthly charge and the extra charges.

2. Special Electric Heating/All Electric Tariff –

Use Electric Heat Tariff – some utilities have special discounted tariffs for customers that heat with electricity or use only electricity and no other source of energy in their homes. If that is the case, and you want to provide special 52667 forms for those customers, check this box. You may need to make more copies of the 52667 tabs and specify that some use the special electric heating rate.

Utility Name and Rate Name – enter the name or an abbreviation of the name for the utility that provides electricity and for the specific rate to be used in the calculations. Many utilities have multiple rates that could be used by residential customers and you should choose one that is the most typical.

Rate Effective Date – often utilities will use the same name for a tariff even though they may change the values. Entering an effective date here will allow you to understand what version of the tariff you are using.

First Month of Summer and Last Month of Summer – select from the pull down lists the months that are the first and last months of the summer period as defined in the electric tariff. If the tariff does not vary by season, use only the “summer” blocks and set the summer period from January through December. If the tariff is seasonal but starts mid-month, make sure the number of months in the tariff that are summer and the number of months here are equivalent since the number of months is more important than exactly when in each month the tariff changes. If your spreadsheet program is not Excel, you may not see the drop down list of choices. If that is the case, just enter the month number in the rows below each input.

Monthly Charges – enter the value charged for electric service. This is sometimes called a monthly charge or a service charge.

Size of XXX Block – This entry is repeated for the first, second, third and fourth blocks of the tariff in the summer and in the winter. If the tariff does not have block rates that vary by season, then only enter values for the summer entries. The size of a block is important for tariffs that have “stepped” blocks. A stepped tariff charges a certain amount for each kWh in the first group of kWh, and different charges for greater use. They are often expressed as 5 cents per kWh for the first 500 kWh and 4 cents per kWh for the remaining kWh. For this case you would enter “500” in the “Size of First Block” and “remaining” in the “Size of the Second Block”. You could also enter a large number instead of the word “remaining” in the “Size of the Second Block” field, which will indicate that the rest of the kWh should be charged at that price. Since some utilities have multiple blocks in their tariffs, up to four blocks are provided. If more blocks are part of the tariff, average the cost of some of the blocks together and combine their sizes. If the rate is not a stepped rate, enter values for the first block only.

Cost of XXX Block – This entry is repeated for the first, second, third, and fourth blocks of the tariff in the summer and in the winter. If the tariff does not have blocks that vary by season, only enter values for the summer entries. The cost of a block is important for tariffs that have “stepped” blocks. A stepped tariff charges a certain amount for each kWh in the first group of kWh, and different charges for greater use. They are often expressed as 5 cents per kWh for the first 500 kWh and 4 cents per kWh for the remaining kWh. For this case you would enter 0.05 in the “Cost of First Block” a 0.04 in the “Cost of the Second Block”. Since some utilities have multiple blocks in their tariffs, up to four blocks are provided. If more blocks are part of the tariff, average the cost of some of the blocks together and combine their sizes. If the rate is not a stepped rate, enter values for the first block only. If multiple companies are involved in providing the utility service, such as when the utilities are deregulated, then add up the costs for each company for that block.

Extra Charges – An extra fee that is charged by the utility for every kWh that is sold. This is often expressed as a fuel cost adjustment, an energy cost adjustment, or a surcharge. Credits are often expressed as a fuel cost adjustment, an energy cost adjustment or a surcharge. Credits are often provided on the basis of every kWh and can be entered as negative numbers. If multiple extra charges exist in the tariff, then add them up.

Taxes – This is expressed as a whole number percent. Don't format the cell in Excel as a "percent" format. For a 3% tax simply enter 3. The tax is calculated after calculating a subtotal that includes the block charges, the monthly charge and the extra charges.

3. Standard Natural Gas Utility Tariff –

Utility Name and Rate Name – enter the name or an abbreviation of the name for the utility that provides natural gas and for the specific rate to be used in the calculations. Many utilities have multiple rates that could be used by residential customers and you should choose one that is the most typical.

Rate Effective Date – often utilities will use the same name for a tariff even though they may change the values. Entering an effective date here will allow you to understand what version of the tariff you are using.

Measurement Units – natural gas utilities provide natural gas on the basis of one of several different units. Select the units used by the utility in the rate. Notice that the units correspondingly change on many of the remaining fields in the tariff. Changing the measurement units will not change the values entered in the rest of the rate. If your spreadsheet program is not Excel and the pull down list is not seen, enter 1 for therms, 2 for CCF, 3 for MCF, and 4 for MMBtu.

First Month of Summer and Last Month of Summer – select from the pull down lists the months that are the first and last months of the summer period as defined in the natural gas tariff. If the tariff does not vary by season, use only the "summer" blocks and set the summer period from January through December. If the tariff is seasonal but starts mid-month, make sure the number of months in the tariff that are summer and the number of months here are equivalent since the number of months is more important than exactly when in each month the tariff changes. If your spreadsheet program is not Excel, you may not see the drop down list of choices. If that is the case, just enter the month number in the rows below each input.

Monthly Charges – enter the value charged for natural gas service. This is sometimes called a monthly charge or a service charge.

Size of XXX Block – This entry is repeated for the first, second, third and fourth blocks of the tariff in the summer and in the winter. If the tariff does not have block rates that vary by season, then only enter values for the summer entries. The size of a block is

important for tariffs that have “stepped” blocks. A stepped tariff charges a certain amount for each therm in the first group of therms, and different charges for greater use. They are often expressed as 80 cents per therm for the first 10 therms and 70 cents per therm for the remaining therms. For this case you would enter “10” in the “Size of First Block” and “remaining” in the “Size of the Second Block”. You could also enter a large number instead of the word “remaining” in the “Size of the Second Block” field, which will indicate that the rest of the therms should be charged at that price. Since some utilities have multiple blocks in their tariffs, up to four blocks are provided. If more blocks are part of the tariff, average the cost of some of the blocks together and combine their sizes. If the rate is not a stepped rate, enter values for the first block only.

Cost of XXX Block – This entry is repeated for the first, second, third, and fourth blocks of the tariff in the summer and in the winter. If the tariff does not have blocks that vary by season, only enter values for the summer entries. The cost of a block is important for tariffs that have “stepped” blocks. A stepped tariff charges a certain amount for each therm in the first group of therms, and different charges for greater use. They are often expressed as 80 cents per therm for the first 10 therms and 70 cents per therm for the remaining therms. For this case you would enter 0.80 in the “Cost of First Block” a 0.70 in the “Cost of the Second Block”. Since some utilities have multiple blocks in their tariffs, up to four blocks are provided. If more blocks are part of the tariff, average the cost of some of the blocks together and combine their sizes. If the rate is not a stepped rate, enter values for the first block only. If multiple companies are involved in providing the utility service, such as when the utilities are deregulated, then add up the costs for each company for that block.

Extra Charges – An extra fee that is charged by the utility for every therm that is sold. This is often expressed as a fuel cost adjustment, an energy cost adjustment, or a surcharge. Credits are often expressed as a fuel cost adjustment, an energy cost adjustment or a surcharge. Credits are often provided on the basis of every therm and can be entered as negative numbers. If multiple extra charges exist in the tariff, then add them up.

Taxes – This is expressed as a whole number percent. Don’t format the cell in Excel as a “percent” format. For a 3% tax simply enter 3. The tax is calculated after calculating a subtotal that includes the block charges, the monthly charge and the extra charges.

4. Fuel Oil Delivery Contract –

Supplier Name – enter the name or an abbreviation of the name for the supplier for fuel oil.

Effective Date – entering an effective date here will allow you to understand what version of the contract you are using.

Monthly Charges – enter the amount that the fuel oil supplier charges to provide service. This is sometime called a monthly charge or a service charge.

Size of XXX Block – This entry is repeated for the first, second, third and fourth blocks of the contract. A stepped contract charges a certain amount for each gallon in the first group of gallons, and different charges for greater use. They are often expressed as 2.50 dollars per gallon for the first 50 gallons and 2.40 dollars per gallon for the remaining gallons. For this case you would enter “50” in the “Size of First Block” and “remaining” in the “Size of the Second Block”. You could also enter a large number instead of the word “remaining” in the “Size of the Second Block” field, which will indicate that the rest of the gallons should be charged at that price. Up to four blocks are provided, if more blocks are part of the contract, then average the cost of some of the blocks together and combine their sizes. If the rate is not a stepped rate, enter values for the first block only.

Cost of XXX Block – This entry is repeated for the first, second, third, and fourth blocks of the contract. A stepped contract charges a certain amount for each gallon in the first group of gallons, and different charges for greater use. They are often expressed as 2.50 dollars per gallon for the first 50 gallons and 2.40 dollars per gallon for the remaining gallons. For this case you would enter 2.50 in the “Cost of First Block” and 2.40 in the “Cost of the Second Block”. Up to four blocks are provided, if more blocks are part of the contract, then average the cost of some of the blocks together and combine their sizes. If the rate is not a stepped rate, enter values for the first block only.

Extra Charges – An extra fee that is charged by the utility for every gallon that is sold. This is often expressed as a fuel cost adjustment, an energy cost adjustment, or a surcharge. Credits are often expressed as a fuel cost adjustment, an energy cost adjustment or a surcharge. Credits are often provided on the basis of every gallon and can be entered as negative numbers. If multiple extra charges exist in the contract, then add them up.

Taxes – This is expressed as a whole number percent. Don’t format the cell in Excel as a “percent” format. For a 3% tax simply enter 3. The tax is calculated after calculating a subtotal that includes the block charges, the monthly charge and the extra charges.

5. Liquefied Petroleum Gas Delivery Contract –

Supplier Name – enter the name or an abbreviation of the name for the supplier for liquefied petroleum gas (LPG).

Effective Date – entering an effective date here will allow you to understand what version of the contract you are using.

Monthly Charges – enter the amount that the LPG supplier charges to provide service. This is sometime called a monthly charge or a service charge.

Size of XXX Block – This entry is repeated for the first, second, third and fourth blocks of the contract. A stepped contract charges a certain amount for each pound in the first group of pounds, and different charges for greater use. They are often expressed as 20 cents per pound for the first 500 pounds and 18 cents per pound for the remaining pounds. For this case you would enter “500” in the “Size of First Block” and “remaining” in the “Size of the Second Block”. You could also enter a large number instead of the word “remaining” in the “Size of the Second Block” field, which will indicate that the rest of the gallons should be charged at that price. Up to four blocks are provided, if more blocks are part of the contract, then average the cost of some of the blocks together and combine their sizes. If the rate is not a stepped rate, enter values for the first block only.

Cost of XXX Block – This entry is repeated for the first, second, third, and fourth blocks of the contract. A stepped contract charges a certain amount for each pound in the first group of pounds, and different charges for greater use. They are often expressed as 20 cents per pound for the first 500 pounds and 18 cents per pound for the remaining pounds. For this case you would enter 0.20 in the “Cost of First Block” a 0.18 in the “Cost of the Second Block”. Up to four blocks are provided, if more blocks are part of the contract, then average the cost of some of the blocks together and combine their sizes. If the rate is not a stepped rate, enter values for the first block only.

Extra Charges – An extra fee that is charged by the utility for every pound that is sold. This is often expressed as a surcharge. Credits are often provided on the basis of every pound and can be entered as negative numbers. If multiple extra charges exist in the contract, then add them up.

Taxes – This is expressed as a whole number percent. Don’t format the cell in Excel as a “percent” format. For a 3% tax simply enter 3. The tax is calculated after calculating a subtotal that includes the block charges, the monthly charge and the extra charges.

6. Water Supply Utility Tariff –

Supplier Name – enter the name or an abbreviation of the name for the water supplier.

Effective Date – entering an effective date here will allow you to understand what version of the contract you are using.

Measurement Units –utilities provide water on the basis of one of several different units. Select the units used by the utility in the rate. Notice that the units correspondingly change on many of the remaining fields in the tariff. Changing the measurement units will not change the values entered in the rest of the rate. If your spreadsheet program is not Excel and the pull down list is not seen, enter 1 for cubic feet and 2 for gallons.

Monthly Charges – enter the amount that the water supplier charges to provide service. This is sometime called a monthly charge or a service charge.

Size of XXX Block – This entry is repeated for the first, second, third and fourth blocks of the tariff. The size of a block is important for tariffs that have “stepped” blocks. A stepped tariff charges a certain amount for each cubic foot in the first group of cubic feet, and different charges for greater use. They are often expressed as 5 cents per cubic foot for the first 500 cubic feet and 4 cents per cubic foot for the remaining usage. For this case you would enter “500” in the “Size of First Block” and “remaining” in the “Size of the Second Block”. You could also enter a large number instead of the word “remaining” in the “Size of the Second Block” field, which will indicate that the rest of the water usage should be charged at that price. Since some suppliers have multiple blocks in their tariffs, up to four blocks are provided. If more blocks are part of the tariff, average the cost of some of the blocks together and combine their sizes. If the rate is not a stepped rate, enter values for the first block only.

Cost of XXX Block – This entry is repeated for the first, second, third, and fourth blocks of the tariff. If the tariff does not have blocks that vary by season, only enter values for the summer entries. The cost of a block is important for tariffs that have “stepped” blocks. A stepped tariff charges a certain amount for each cubic foot in the first group of cubic feet, and different charges for greater use. They are often expressed as 5 cents per cubic foot for the first 500 cubic feet and 4 cents per cubic foot for the remaining usage. For this case you would enter 0.05 in the “Cost of First Block” a 0.04 in the “Cost of the Second Block”. Since some utilities have multiple blocks in their tariffs, up to four blocks are provided. If more blocks are part of the tariff, average the cost of some of the blocks together and combine their sizes. If the rate is not a stepped rate, enter values for the first block only.

Extra Charges – An extra fee that is charged by the utility for every cubic foot that is sold. This is often expressed as a surcharge. Credits are often provided on the basis of every cubic foot and can be entered as negative numbers. If multiple extra charges exist in the contract, then add them up.

Taxes – This is expressed as a whole number percent. Don’t format the cell in Excel as a “percent” format. For a 3% tax simply enter 3. The tax is calculated after calculating a subtotal that includes the block charges, the monthly charge and the extra charges.

7. Sewer Tariff –

Sewer Charge Included in Water Tariff – check the box if the water tariff (described above) already includes the sewer charge. This is the case for many locations. If this box is checked, no other inputs are necessary.

Supplier Name – enter the name or an abbreviation of the name for the sewer company.

Effective Date – entering an effective date here will allow you to understand what version of the contract you are using.

Measurement Units –utilities provide sewer service on the basis of one of several different units. Select the units used by the utility in the rate. Notice that the units correspondingly change on many of the remaining fields in the tariff. Changing the measurement units will not change the values entered in the rest of the rate. If your spreadsheet program is not Excel and the pull down list is not seen, enter 1 for cubic feet and 2 for gallons.

Monthly Charges – enter the amount that the sewer utility charges to provide service. This is sometime called a monthly charge or a service charge.

Size of XXX Block – This entry is repeated for the first, second, third and fourth blocks of the tariff. The size of a block is important for tariffs that have “stepped” blocks. A stepped tariff charges a certain amount for each cubic foot in the first group of cubic feet, and different charges for greater use. They are often expressed as 5 cents per cubic foot for the first 500 cubic feet and 4 cents per cubic foot for the remaining usage. For this case you would enter “500” in the “Size of First Block” and “remaining” in the “Size of the Second Block”. You could also enter a large number instead of the word “remaining” in the “Size of the Second Block” field, which will indicate that the rest of the usage should be charged at that price. Since some suppliers have multiple blocks in their tariffs, up to four blocks are provided. If more blocks are part of the tariff, average the cost of some of the blocks together and combine their sizes. If the rate is not a stepped rate, enter values for the first block only.

Cost of XXX Block – This entry is repeated for the first, second, third, and fourth blocks of the tariff. If the tariff does not have blocks that vary by season, only enter values for the summer entries. The cost of a block is important for tariffs that have “stepped” blocks. A stepped tariff charges a certain amount for each cubic foot in the first group of cubic feet, and different charges for greater use. They are often expressed as 5 cents per cubic foot for the first 500 cubic feet and 4 cents per cubic foot for the remaining usage. For this case you would enter 0.05 in the “Cost of First Block” a 0.04 in the “Cost of the Second Block”. Since some suppliers have multiple blocks in their tariffs, up to four blocks are provided. If more blocks are part of the tariff, average the cost of some of the blocks together and combine their sizes. If the rate is not a stepped rate, enter values for the first block only.

Extra Charges – An extra fee that is charged by the utility for every cubic foot that is sold. This is often expressed as a surcharge. Credits are often provided on the basis of every cubic foot and can be entered as negative numbers. If multiple extra charges exist in the contract, then add them up.

Taxes – This is expressed as a whole number percent. Don’t format the cell in Excel as a “percent” format. For a 3% tax simply enter 3. The tax is calculated after calculating a subtotal that includes the block charges, the monthly charge and the extra charges.

8. Trash Collection Fees – enter the average monthly fees for different size dwelling using for trash collection.

9. Range/Microwave Fees – enter the average monthly cost for renting or financing the purchase of a range and microwave oven for different size dwelling unit.

10. Refrigerator Fees – enter the average monthly cost for renting or financing the purchase of a refrigerator for different size dwelling units.

11. Other Fees – enter the average monthly fees for different size dwelling units for any other fees.

C. 52667 Tabs

Each 52667 tab contains three sections: Case selection, the HUD 52667 form, and the computations to create the form. They are described below. Each 52667 tab has been designed to be independent so they can be copied or deleted without affecting other forms. Since the calculations are located on the same tab as the form, almost no “linking” is needed when more 52667 tabs are added or deleted.

Unit Type – select the type of unit that corresponds to the form. The unit types include detached houses, townhouses, apartments and manufactured homes. If you add new 52667 tabs, it is a good idea to name the tab using the unit type as part of the name.

Electric Tariff – select “Standard Electric Utility Tariff: for most situations. The only time you would choose the other option, “Special Electric Heating/All Electric Tariff”, is when the utility has a special discounted rate for allowances for those units and when you are trying to make a HUD 52667 form for those specific units.

Electric Heating – most housing authorities will select “Mixed Electric Resistance and Heat Pump Heating.” If your housing authority has a different allowance for homes with heat pumps, select “Heat Plumps Only.” The allowances for heating with heat pumps are smaller since heat pumps are more efficient than electric resistance heating.

Age of Dwelling – use this input if the housing authority has different allowances for dwellings of different ages, or if not, select “Mixed Ages”. There are three choices for age ranges: “Before 1980”, “1980 to 1996”, or “1996 or Newer”. Each selection modifies the heating and cooling values.

Each 52667 tab should have a unique selection of the Unit Type, Electric Tariff, Electric Heating, and Age of Dwelling.

The HUD 52667 form is shown in the upper left hand corner of the spreadsheet tab in the white background. The grey border is not part of the form. Only the form within the grey border should be printed when printing the tab. If the printout contains the computations, then use [File][Select Print Area] menu after you select only the form part of the spreadsheet tab.

No modifications to the 52667 tab are needed except for the selection for “Unit Type”, “Electric Tariff”, “Electric Heating”, and “Age of Dwelling”. The rest of the spreadsheet, including the form should not be modified. All values that are shown on the form are linked from the calculations part of the tab.

The calculations part of the 52667 tab are below and to the right of the form.

Computations– are below and to the right of the form and cannot be modified. They use values entered on the “Location” tab and the “Tariffs” tab and the selections at the top of the 52667 tab and generate all of the values needed for the HUD Form 52667. You may want to review the calculations to understand how values on the form are determined. The calculations start at the “Age of Structure Adjustment” section and proceed downward in a stepwise manner.

The Derived Consumption Equations are based on an analysis performed using primarily data from DOE/EIA Residential Energy Consumption Survey (RECS). Most of the coefficients for the variables in the equations were derived using regression analysis of RECS survey cases. The coefficients were derived for the five basic housing unit types that RECS uses and a table is present to adjust these five housing unit types into the unit types you have selected. These are then combined into groups by utility in the section labeled “Average Consumption Per Month Component Subtotals and Ordering.” In each group, the services are added individually until finally the last group for electricity “Other Electric + Cooking + Water Heating + Heating + Air Conditioning” is shown. The reason for this is that the utility bills are estimated for each group and then the difference between the groups, the incremental cost, for each added service can be independently determined.

Unit conversions are then performed for the energy consumptions that could have different measurement units applied.

The next section labeled “Tariff Summary” has links to the tariffs tab but is shown in more compact summary format. Directly after that is the electric and natural gas tariffs shown on a month-by-month basis depending on the starting and ending month selected for each. The other utilities do not vary by season so they do not need to be represented monthly.

Climate adjustments are made for the heating and air conditioning uses. They are adjusted by the degree days entered on the location tab and are shown on a monthly basis. The incremental consumptions are then also expressed on a monthly basis.

All utilities are then calculated on a monthly basis for each dwelling unit size in terms of number of bedrooms. The utility bill estimates are compiled for each of the consumption groups and then the incremental difference between the groups are determined to obtain the incremental cost for just that end-use.

The number of consumption units and the cost of each consumption unit per block are separately calculated. The monthly charges and the extra charges are calculated, as are the taxes and the total bill for each consumption group. This is repeated for each consumption group and for each utility. The monthly and annual costs are then calculated. The formulas for each utility bill estimate are very similar.

The average monthly costs are determined from the annual totals and some checks are performed to make sure that all components are included.

Non-energy related expenses are shown in a compact format similar to the utility tariff summary section.

A summary of total utility allowances is shown for a variety of cases. This summary is copied and “past linked” to the summary tab.

D. Summary Tab

The “Summary” tab contains the only links to the 52667 tabs. If your housing authority doesn’t require a summary to process the 52667 forms, then you can ignore this tab. The summary tab takes the values from the 52667 tabs near the bottom of the calculations (located below and to the right of the form) and links to them. The summary is only for the most common number of bedrooms for each type of unit and does not include certain combinations of fuel uses that are likely to exist. The summary tab includes both the energy and non-energy portion of the allowances. All values shown are in dollars per month.

E. Creating New 52667 Tabs

For many housing authorities, the four 52667 tabs that come predefined in this spreadsheet may not be appropriate. The four predefined tabs are “Detached 52667”, “Townhouse 52667”, “Apartment 52667”, and “Manu 52667”. These are the four forms that are the most likely to be used by housing authorities. To create a new tab, copy one of the existing 52667 tabs by right clicking on, for example, the “Detached 52667” tab name and select the “Move or copy...” option. Select where the new 52667 tab should go and check the “create a copy” checkbox at the bottom of the menu block and then click OK.

If you are using the Summary tab, you will need to use [Edit][Copy] and [Edit][Paste Special][Paste Link] to connect the summary information from the bottom of the calculation section of the new 52667 tab to the summary table.

F. Removing Some 52667 Tabs

If you don't need all of the 52667 tabs shown in the spreadsheet, you can delete the tabs by right clicking on the name of the unwanted tab and selecting Delete. If you are using the Summary tab, you may need to delete the portion of the table linked to that spreadsheet tab.